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COUNTRY LIFE

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COUNTRY LIFE

VOL. XLVI.—No. 1175.

SATURDAY, JULY 12th, 1919.

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E. O. HOPPÉ

MISS DOREEN FRANK.

7, Cromwell Place, S.W.

COUNTRY LIFE

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THE STILL SMALL VOICE

IN these days it requires considerable courage to attempt to recall anything so dull as mere duty. The populace gets intoxicated with one excitement after another, and there seems to be no end to the exhilaration of victory. That is natural enough. We have fought a great fight and it would be unreasonable to expect that the day of triumph should not be celebrated with rejoicing. Let the people rejoice, then, by all means. At the same time one has only to glance down the columns of the newspapers to see that in the midst of this world of jubilation a dark shadow is continually moving. It is the black shape behind the horseman. If we look over the whole extent of the world, it is seen that from far off Japan to our nearest neighbour, the countries are in a ferment. The long fight has left behind it a train of evils which threaten the very existence of some nations and are a trouble to all. It is very strange, when you come to think of it, that the same problems have to be met by countries which were in the war, but suffered nothing from it, and those who bore the full brunt of the battle. Japan, if one judged statistically, has gained rather than lost by the war in many directions. Its export trade has increased enormously and the total riches of the country must now be far beyond what they were in 1914. Comparatively speaking, Japan had no expenses at all. The campaigns were carried out quickly and in a workmanlike manner and involved no fearful outlay of money. Internally the country was in a position to go on tranquilly producing and supplying the needs of the

belligerents. Yet the same problem has arisen there as among ourselves. Everything is dear, there is an outcry against profiteering, and an agitation is going on to make the Government conserve those things that are necessary to existence, that is, refuse to let them be exported and to import such articles as Japan itself is unable to produce. The dissatisfaction is serious, and though we may trust Japanese statesmanship to rise to the occasion, anxiety must be felt. In France the conditions are even worse. Nothing has come yet from the German promise of reparation, and in the meantime the nation is exhausted and confronted with a threat of bankruptcy. Here in this country the poverty to which, as a nation, we have been reduced, is ignored and people who drew fortunes, or, at any rate, considerable incomes, out of the necessities of the war are spending them merrily as though the process of borrowing could go on for ever.

The responsibility lies upon Great Britain more than on any other country in the world to show that resolute measures should be promptly adopted for extricating the nation from its fool's paradise. After all, statesmen may reflect that the restlessness now is simply a recurrence of what has happened after every other great war of the past. There is a reaction from anxiety on the one side, and, on the other, exaggerated hopes of a new heaven and a new earth. Unfortunately these pathetic hopes cannot be fulfilled. Wealth and prosperity do not fall from the heavens as manna did in the wilderness. The business of our statesmen is to dissipate the illusion and get the understanding made general that work is the only way to wealth. That seems a roundabout way of approaching the difficulty of the hour, which arises from the inflated expectations of labour and the hostility between labour and capital. It is strongly manifested in the industry with which we are most intimately associated here, that is to say, agriculture. Every employer of labour agrees in saying that the men who come back from the war show the utmost reluctance to attack with their coats off the tasks allotted to them. In consequence, it looks very much as if the greatest of our industries is about to relapse into the condition in which it was before the war. Capitalists see that husbandry offers very little encouragement to those intent upon getting rich quickly. Its prospects are not anything like so alluring as those of other industries. No doubt many people are rushing into it, or the sales that have taken place would not have been possible. But they are for the most part newcomers who have formed exaggerated notions of what is possible. When they discover the difficulties and hardships of the task before them, there will probably be a violent reaction from the present anxiety to own or hire land.

Those who have been working at husbandry for a lifetime were never so utterly discouraged as they are at the present moment. These conditions are, we believe, thoroughly appreciated by the members of the Government, but they are not very wisely advised and are resorting to schemes and measures which are not likely to produce the required result. The main point, we believe, is that Capital and Labour should not only work together, but should become one; that is to say, the working man should derive his income from profit as well as from wages. Individuals throughout the country recognise this well enough and thousands of schemes of co-operation between Capital and Labour are being tentatively put in practice at the present moment. But it is desirable that the Government should recognise the need for the general application of this principle, so that on every holding throughout the country it would be applied. Very likely it may turn out that the principle of the minimum wage may be repudiated. It is working in a very unsatisfactory manner. The problem really is to combine the better remuneration of agricultural labour, with participation in profit that will act as a stimulus to greater effort. For the requirement of the moment is, first and foremost, more work, more application from the individual; and the business of the statesman is so to mould the new conditions as to encourage that co-operation between master and servant which will blend their interests into one.

Our Frontispiece

AS frontispiece to this week's issue of COUNTRY LIFE we print a portrait of Miss Doreen Frank, who was presented at the last Garden Party. Miss Frank is the only child of Sir Howard Frank, K.C.B., and Lady Frank.

* * * It is particularly requested that no permission to photograph houses, gardens or livestock on behalf of COUNTRY LIFE be granted except when direct application is made from the offices of the paper.



THE NATIONAL THANKSGIVING: THE SERVICE OUTSIDE ST. PAUL'S.

COUNTRY NOTES

IT would be difficult to imagine a more solemn or imposing Peace Celebration than was witnessed at all the churches in the land on Sunday. With the nation it is the same as with the individual. The underlying religious instinct, though it may long have lain dormant, springs like water from a well in the presence of these great events of life which touch the very centre of being. Who has not felt like Thomas Carlyle and longed to express himself by a prayer or a psalm when his soul was flooded with a great emotion of joy or sorrow? This war to many of us has meant both. Few have not experienced the melting of heart, the intensified kindness to all which follow affliction. A national affliction above every other makes us all feel kinship one with another. Still greater is the effect of joy and thankfulness for which the present occasion is unparalleled. For the war is ended, the loved ones are home again, and Peace is once more asserting her gentle sway, that we would fain hope to be perpetual. And even the voices of the dead lying in far away tombs must have been heard by those dear to them, mingling in thanksgiving for an end that crowns the glory of their sacrifice.

IN proposing the toast of the College at the Wellington College dinner the other day Sir Ian Hamilton made some pregnant remarks about the system prevailing in public schools and the suggestion that it might advantageously be introduced into the elementary schools. He referred particularly to the fact that a boy in a public school is in his early days under the direction of his seniors, well knowing that in his turn he will have to occupy the position of his elders. It is a practical exemplification of the old truth that a youth must learn to obey before he can command. But why should this be confined to one class of school and not apply to another? Sir Ian Hamilton suggests that if boys in an elementary school were taught to help the master by running their own school discipline, the effect would be altogether good. It would conduce to homogeneity, since all would catch the spirit of the public school, which is the school first and self afterwards. The object of statesmanship in education, as we have time and time shown, is exactly to secure this result, that is, to weld individuals and classes into one community—a community permeated with the spirit of brotherhood and common aims.

LITTLE did we dream some weeks ago, when asking Lord Rayleigh to write about pinhole photography and use his own illustrations, that before the article could be published he would have passed away. One has to think before realising his age. On the borderland of fourscore, his scientific interests were as keen as they had been in the Senior Wrangler of fifty-eight years ago. The reason for delay in publishing his pinhole photographs was simple. Lord Rayleigh, in writing about them, forgot that his words were not addressed to a circle of experts such as he was accustomed to address. He was too technical and too learned for any ordinary audience. So Professor D'Arcy Thompson, who is also

very keenly interested in the problems of light, was induced to write of the matter in that simple and charming style of which he is a master. Our readers will themselves judge of the result. To many the history of pinhole photography will be a revelation. That it should have been understood and practised by Leonardo da Vinci is one more trait added to our knowledge of the versatility of that unparalleled combination of science and art.

OF course, pinhole photography is a small thing to judge Lord Rayleigh by. The discovery of argon, an account of his beautifully exact experiments, a recital of his chief contributions to science, a mere list of the honours and distinctions showered upon him, would have formed a more fitting tribute. So would his history as a landed proprietor, one who did not disdain any more than the poet Tennyson disdained to keep a herd of dairy cows and supply milk, while at the same time he contrived a system for admitting labour to a share of farming profit. But a little speaks for the whole, and Professor D'Arcy Thompson, fortunately, is able to show that pinhole photography is a key to many mysteries, the clearer understanding of the properties of light and the working of the human eye among them; and out of the stores of his learning he has been able to prove that the problems connected with it have engaged human ingenuity since the day of Aristotle and his philosophy.

DEVON.

A narrow pathway climbs a little hill
Drowned in a tide of heather—purple seas
Yielding a fragrance that the airs distil
And murmurous with honey-heavy bees.

And on the summit of the little hill,
Where that slow tide its furthest ripple flings,
I lie beneath the sun and hear the trill
Of mounting larks, and watch their far-off wings.

And all the earth seems drawn into a space
Of blue tranquillity and gold content,
Where pain is dumb and sorrow hides her face
And only loveliness is eloquent.

Here would I be, O heart of love, with you
Curled in the heather where the wild bee plies,
Gold hair sun-soaked with gold, and all the blue
Of the hot heavens brimming in your eyes.

MARGARET LARMINIE.

THE popularity and success of the Lawn Tennis Championships at Wimbledon in this the first year of their renewal reached their climax on Saturday, when the King and Queen honoured the tournament with their presence. They came to watch, not the contest for the Men's Championship, but a match between two ladies, and their choice was a happy one, for no more spirited exhibition of courage and skill

was surely ever seen on a lawn tennis court. It is hard to know to which player most honour and sympathy should be accorded: to the victor, Mlle. Lenglen, the young French lady scarcely out of her teens, who bore the long strain with the coolness of a veteran, or to our own Mrs. Lambert Chambers, who may almost, without lack of chivalry, be called a veteran, and fought to retain her long held title with such splendid dash and tenacity. Not only was this the finest match ever played between two ladies, but it marked in some sort the end of an epoch. There has hitherto been a tradition that ladies' lawn tennis was, in a way, a game of its own. The game that ladies played so well, and Mrs. Lambert Chambers best of all, differed in strokes and in method from that of male champions. This tradition Mlle. Lenglen has destroyed once and for all. She has been trained from her childhood to play the game exactly as a man plays it, and her victory has overturned a supposed barrier in athletics between the sexes.

WHILE Mlle. Lenglen has taken the Ladies' Championship to France, the Men's Singles and Doubles Championships go to Australia, whose players have covered themselves with glory; nor are these the only victories to the credit of the Dominions. At Henley the Australian Army crew won the King's Cup, and the Kingswood Sculls went to Hadfield of New Zealand, a splendid and powerful specimen of manhood remembering one of those other wearers of the black jersey and silver fern who spread devastation through our Rugby football fields a few years since. Against these we have two cheering successes to set, that of the Leander Four against the Americans and that of the brothers Buxton in the Pairs. Last week was altogether a crowded week of international sport. This one is consecrated to our own players of games, and for those who love cricket and old friendships it is perhaps the most delightful week of the year. There is better cricket than that played between Oxford and Cambridge and Eton and Harrow, but no other festivals at which so many men meet who would not otherwise do so and take up their ancient friendships easily and without embarrassment.

IT should be realised that the appointment of a Costing Committee cannot possibly result in any prompt settlement of the great difficulties with which agriculture is faced. The subject dealt with is not one on which a definite and satisfactory report can be made within a short space of time. It is now being recognised that it is practically impossible to work out the cost of any specific crop by itself. The farmer has to arrange so that in many instances the expense of growing one crop is made good by profits derived from another. As a rule he works up to his wheat crop. The first step is that of growing roots, which provides an opportunity of thoroughly cultivating, manuring and cleaning the ground. This crop is valuable because it provides winter keep, but it is very costly and it is difficult to distribute the expense. Live stock are usually kept for more than one season, and therefore the benefit they derived is a fraction not easy to determine. Following the roots comes a grain crop and oats or barley, along with which the seeds are sown for next year's hay. Here arises another complication, because expense is incurred in regard to two crops while only one is produced within the year. In the next season there is hay, but before it was allowed to grow the land was probably fed over. Finally there is the wheat crop, which reaps the benefit of the previous cultivation and also usually receives a good dressing of farmyard manure. It would be a triumph of book-keeping to separate all the items of expenses so as to compare them with the returns.

UNFORTUNATELY, there are many farmers who are utterly unable to keep books at all. We were talking with one the other day who had just received directions from the Government to render an account of his expenditure and returns. He is a good farmer—a 100-acre man—who has risen from the ranks of labour and purchased his holding. But as part of the money had to be borrowed on mortgage, his position is not intrinsically different from the tenant who pays rent. "I cannot keep books," he said, "and if the Government want this done they must send their own clerk to do it." Then he went on to explain how far he had got in working out costs himself. We give his statement simply as a specimen of information gained directly from the farm. He said that three men are employed on his 100 acres, each of whom receives a standing wage of 45s. a week, which in certain weeks of this year was raised to 51s. 6d. by overtime. His point was that the wages of these three labourers amounted to more in the year than he was likely to receive for his wheat crop. He calculated that this, which is the best and ought

to be the most remunerative product of the farm, would at the best amount to about 100 quarters. The price of wheat at present is 70s. a quarter, so that his gross return would be £350. But the wages of three men at 45s. a week amounts exactly to that sum within a pound, excluding payment for overtime. Now, obviously this must mean a loss, unless a profit was made on the other crops, because, of course, there is the interest on capital which has to be paid, the outlay for seed, the cost of horses and manure, and, what has now become a serious item of cost, for threshing.

IT was on the ground that the conversation took place, and the farmer pointed with his walking stick to the fields as he spoke. On the meadows there was last year one huge stack of hay and a small one. This year there is only a small one. Part of the twenty-five acres which he was devoting to roots have proved uncultivable, first, because of the wet, and then because the rain was followed by very brilliant sunshine which caked the land. He had persevered with his plough to some extent, but do as he would it remained rough and cloddy. There could be no profit on his hay, none on his roots, barring the potatoes, of which he only grows ten acres. The spring sown cereals there, as everywhere, are only about 18ins. high, and, as he explained, good heads were not to be dreamed of. He concluded his remarks by saying: "I am sick of farming." "For the first time?" "Yes, for the first time," he replied, "and I am seventy-seven. I will sell the land and have done with it." Now, that is the conclusion of a man who is above the ordinary in regard to skill and previous success, and it shows at least a little corner of the great problem that awaits solution.

R. H. A. OLYMPIA, 1919.

Back again driving the guns
Under the great roof's span,
Weaving the pattern again
Deep in the soundless tan.

It's glitter and polish now
Where once were the stains of blood,
It's polish and pipeclay now
Where the drab paint dripped with mud.

Back again driving the guns
Over the soundless tan,
Never a hole in the road
Never a stricken man.

But horses well groomed and fit
(How they screamed in their pain!)
Sheltered from wind and storm
(Think of the Flanders rain).

Back again driving the guns
Round the arena to race,
Instead of the bursting shells
A band to set us the pace!

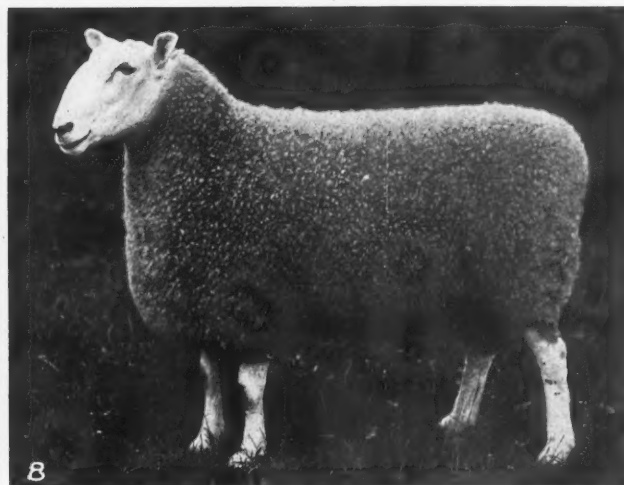
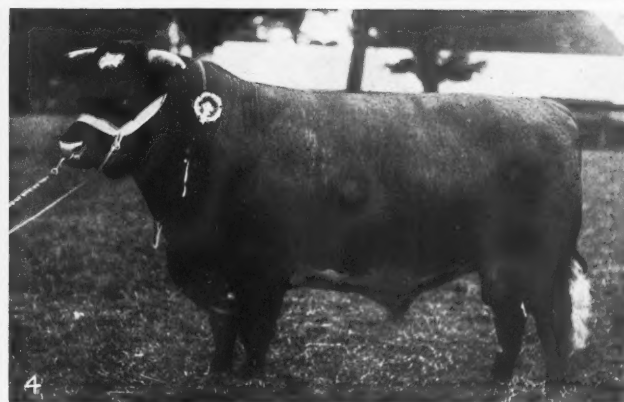
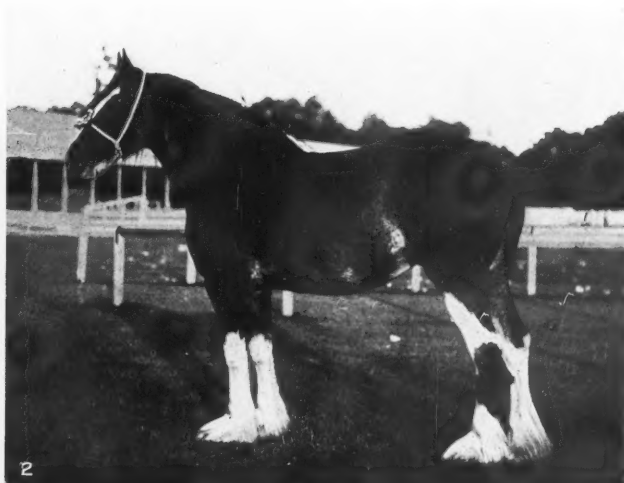
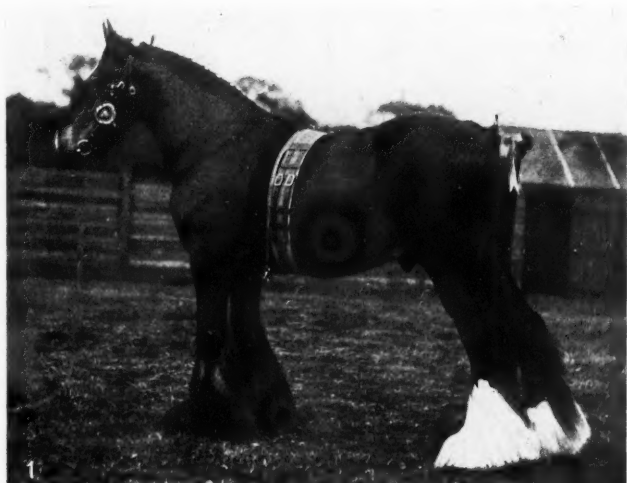
Back in the blue and the gold
Smart as we used to be,

By the limbers are khaki ghosts
Dead gunners from over the sea.

M. G. MEUGENS.

THOSE interested in war memorials to the extent that they have determined to obtain a design which will not only please at a first glance but give satisfaction for all time should not fail to visit the exhibitions at the Victoria and Albert Museum which have been organised by the Academy War Memorials Committee. They will find a strong dividing line between the ancient and the modern. The former are to be found in the East Hall as grouped objects, designs and photographs chosen from the Museum collections. Among these are things absolutely perfect, and there is variety enough to appeal to every possible taste. The best—that is to say, the unequalled—work of Greece and Rome is represented, so is that of the Italian Renaissance. The old gift of combining beauty and restraint is seen here in all its excellence, and we can scarcely conceive any visitor of taste who will not find something to satisfy his requirements. Not so much can be said for the collection of designs and models executed by living artists or now in the course of production. The contrast is very marked. It is, indeed, an education to compare the one with the other. No one will regret an hour or two spent in the examination of the two collections.

CHAMPIONS AT THE ROYAL SHOW



1. Fenny Emperor, Champion Shire Stallion (Mr. Denby Collins). 2. Rosalind, Champion Clydesdale Mare (Messrs. F. J. Dickins and F. Calvert Butler). 3. Proud Dorothy, Champion Shorthorn Heifer (Mr. W. M. Cazale). 4. Garily Lancer, Champion Shorthorn Bull (Mr. A. J. Marshall). 5. Goodenough, Champion Hereford Bull (Mr. P. E. Bradstock). 6. Dumnald Daphne, Champion British Friesian Cow (Olympia Agricultural Company). 7. Champion Lincoln Ram (Mr. C. Nickolson). 8. Champion Border Leicester (Messrs. R. G. Murray and Son).



GARTER KING OF ARMS READING THE PROCLAMATION AT ST. JAMES'S PALACE.

ENTER A HERALD

BY OSWALD BARRON.

WE English might be called, of all peoples, the least ceremonious. We live easily; our hats are often on our heads, where the foreigner's hat would be swept off with a flourish. We kiss no hands, nor do our heels click as we bow. Our letters end with a "Yours Truly," without any plea that the assurance of our most distinguished consideration may be received. Yet this does not mean that we have no regard for ceremony. Indeed, we love it, so long as our ceremonies may be done by our proxies.

The newspapers do most of the heralds' work in these days. It was the daily newspaper that made public day by day the list of names of our young knights dead on the fields of France. The journalist is first to proclaim the deaths and accessions of kings. He first told us that the country was at war and sent the news of Armistice and Peace fluttering down the street. Yet in our hearts we knew that Peace should come in with proper ceremony. We would have the great news cried aloud by Garter King of Arms before the royal palace, and have it brought by heralds riding to the City of London. We did not shout when we had that news on a printed sheet; but we could make a joyful noise when the herald read the belated tidings.

Even the newspapers took the news again from the heralds, printed what they had proclaimed, sent out their cameras so that everybody in England should have a sight of those splendid coats.

Splendid coats, coats of antiquity are those shining garments the tabards of the King's arms. It did us good to look upon them. Indeed, we know very

little about heralds and heraldry, but they are a joyful mystery. There was a pursuivant whose pride had a fall in a jostle of horses near Temple Bar; before night there was a printed picture of his peril, a picture underneath which a journalist in his haste had called the pursuivant a sergeant-at-arms. If you be in the crowd when the King goes by in State, it is odds that you will hear, "There go the heralds," as the trumpeters pass. All that we know is that, somewhere, where the gold flashes, where the trumpets are sounding, is that mysterious priesthood of heraldry.

It may be said that we do not see those priests often in flesh and velvet and cloth of gold; once only, perhaps, in a generation, may an obstinate sightseer come to the vision of a king of arms in all his glorious array, his oakleaf crown on his head. The playactors and the picture painters give us false shadows of them. There is a stage direction, under the hand of Shakespeare himself, which has played the mischief with our imagining of heralds; it says, "Enter a herald with a trumpet," and if you pay for a seat at the play you will surely see the herald enter with a trumpet in his hand. Mr. Shakespeare, who had watched the heralds many a time, knew what he meant by that direction. His trumpet was

a trumpeter, as his ancient was the officer who bore the ancient, the ensign of the company. His herald was to come haughtily upon the stage, followed humbly by the man who should blow a blast to let all know that the herald would speak his message. But the players who came after Shakespeare let one man double the parts, a tabard on his back and a trumpet in his fist. That is the



YORK HERALD AT CHARING CROSS.

herald of our fancy; the Victorians, bred in nurseries where "Alice in Wonderland" was a nursery bible, had never any doubt about that figure; did not the White Rabbit grasp a bannered trumpet in the picture where the White Rabbit wears the armorial tabard of the Kingdom of Hearts? With that picture in our memories, who can blame us if heraldry and trumpeting be reckoned by us as the proper business of the officers of arms.

"Enter a herald with a trumpet." Indeed, he has made his entry in many sumptuous scenes of these many hundred years. There were kings of arms in the courts of thirteenth century kings of England, where there were other kings whose royalties are now long forgotten, kings of the minstrels, kings of the ribalds. Only the kings of England and the kings of arms endure.

For a fee you might once have the King's heralds at your pompous funeral, to which they gave much dignity. "It was my hard hap," wrote King Charles II's Bluemantle Pursuivant, "to become a member of the College of Arms when the ceremony of funerals, as accompanied with officers of arms, began to be in the wane." A new gentry, wanting new coats of arms, came to the heralds, who would sign and seal a bravely painted parchment. Also the trade of pedigree making had sprung up; Mæcenas, when his illustrious ancestry is first discovered for him, is in a generous humour.

So the heralds lived on, and it is well for us that they did. The ceremony of peace making would have been flavourless without the sight of those kings of arms in their majesty, those heralds and pursuivants riding with the King's arms embroidered on back and breast and shoulder. Under the tabard and with it they have worn strange gear. Tabards have been clapped over long furry gowns; the Elizabethan ruff stood out stiffly above the tabard and so did the high shirt collars of the Early Victorians. The heralds were odd figures in powdered wigs; gallant figures when they dressed like the Van Dyck portrait. But always they have kept the King's coat. Clad in it, they are images of the king; something of majesty goes with the coat; the herald's person is sacred by all the rules of chivalry.

The knights are dust, the knights who owed knight service and rode to it in bright armour. Yet we who stood beside the place of Temple Bar saw their companions the heralds and pursuivants still in the saddle after their long ride through the ages and we were glad to have the news of Peace brought by them in the stately old fashion.



SOUNDING THEIR SUMMONS TO THE CITY.



THE LORD MAYOR WAITING AT TEMPLE BAR.



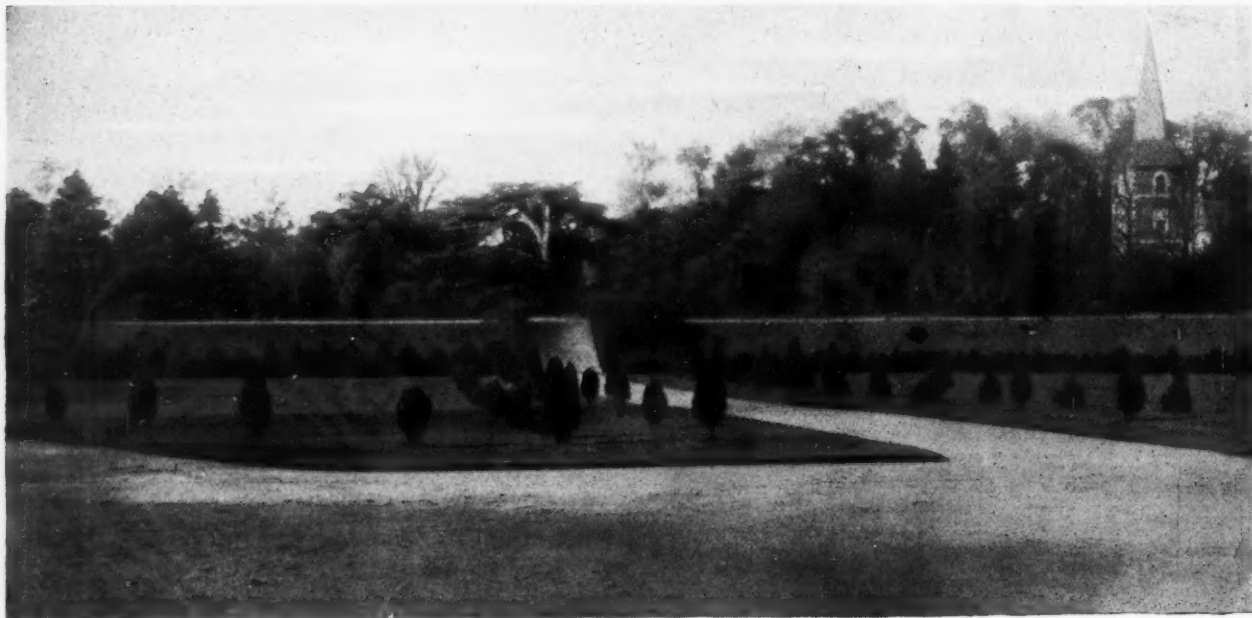
THE LIFE GUARDS' BAND.

THE LATE LORD RAYLEIGH AND PINHOLE PHOTOGRAPHY

BY D'ARCY W. THOMPSON.

AMONG our illustrations to-day are two photographs of an unusual kind and of great interest to the photographer; we owe them to Lord Rayleigh, whose handiwork they are. In ordinary practical photography a "lens" is the first essential thing, and all depends on the construction and quality of the lens and its immediate adjuncts. But these photographs of Lord Rayleigh's garden and of a fine old cedar therein have been taken without any lens at all; they are made by "pinhole photography." The "pinhole camera" is no new thing. It is one of the oldest of all optical instruments; it is perfectly well known, even to schoolboys. Books have been written on its use; for instance, two well known little treatises (in the "Photo-Miniature" series) by the Rev. J. B. Thomson of Greenock and by Dr. D'Arcy Power of San Francisco. But Lord Rayleigh has carried the theory of the subject a step further, and these pictures of his are, so to speak, glorified pinhole photographs, done under careful calculation; they hold their own (like some few others) with ordinary good "outdoor work," done with costly apparatus,

that ray goes on and forms a corresponding point upon the screen. So, obviously, if we suppose a single ray from each single point of the object to reach the screen, they will there form a complete image of the complete object, just as when we used the lens. The image will in both cases be an "inverted image," and the only practical difference will be that the pinhole will give a fainter image than the lens; for a vast number of rays will have fallen on the partition and been lost, for one which goes through the pinhole; while in the case of the lens these rays (or most of them) will have been gathered in and will have helped to constitute the image. So far as this goes, then, we realise that our pinhole camera produces an image just as perfect, only not so bright, as does our lens camera; and it is plain, therefore, that the photographer may employ it with complete success, given one or other of two conditions: either that he has more light than he needs, as in a picture of a sunny garden, or when he is dealing with some restful subject for which time is no object—for example, if he be photographing the interior of a building where nothing moves and where he may expose his plate for hours or even days.



A VIEW IN LORD RAYLEIGH'S GARDEN.

and it is hard to believe that they are produced with no "apparatus" at all.

The photographer's business falls into two parts: (1) the forming of an "image," and (2) the making of that image into a "picture," to remain after the object itself has vanished. The latter part is "photography," and is a branch of chemistry; the former is simple optics, and was studied hundreds of years before "photography" was dreamed of. It is the optical part alone with which we are concerned, and only the merest elements of that. A point of light, an illuminated point, as we conceive it, throws out "rays" in all directions. Put a "screen" in front of it and the screen is illuminated and nothing more; but when we interpose a "lens" the function of that lens is to bring together all the rays which fall upon it into (theoretically speaking) a single corresponding "focal point." If we start with two points of light, then each has its corresponding focal point, and we have the first beginnings of a complete "image" of a complete object; without our lens we have nothing of the kind, only a diffuse illumination radiating from the one point, and superimposed on a diffuse illumination coming from the other. But let us, after taking away our lens, replace it by an opaque partition, with one tiny hole in it. Then we may suppose (though it is putting it very simply indeed) that from our illuminated point all the diffused rays travelling towards the screen are stopped by the partition, save only the slender beam, or (as we may call it for short) *the one single ray*, which passes through the little hole;

In a hot country, when we are taking our siesta in a shuttered room, it is the commonest thing in the world to see a little round image of the sun thrown on the wall opposite from a chink in the shutter; and now and then we see the same thing, or, perhaps, many little dancing suns, when we lie in a shady wood, and the little rifts and chinks of the foliage form, in like manner, "pinholes" for us. The former phenomenon was watched by Aristotle himself—at least it is recorded in the book of ancient "Problems" which passes under Aristotle's name. Now, as I think of it, it seems just possible that it throws new light—a light I never saw before—on a hard but very beautiful line in Aeschylus, where he tells us that all around us there are rifts and openings as in a leafy wood, and very hard they are to see through, but through them there comes down to us [the very image of] the Thoughts of God:

δαλοὶ γὰρ πρᾶπιδων δᾶσκιόι τε τείνοντι πόροι κατιδεῖν ἄφρωτοι.

As an optical instrument the pinhole camera is very ancient, how old we do not know, for its history goes back to the Dark Ages—to centuries which we call "dark" only because we know so little of them; when learning in the great Moorish Universities was very much alive, though it is now dead and buried and forgotten. A certain Al Kindi is said to have used the camera in the eighth century, and some 250 years later Ibn al Haitam, or Al Hazen, used it for the study of eclipses. A learned Jew, Levi ben Gerson,

wrote about it in the beginning of the fourteenth century; and about the same time a still more learned Arabian wrote a commentary on Ibn al Haitam's book, and described the instrument in detail. The name of this last great scholar was Muhammad Ibn al Hassan Kamal al Din Abu'l Hosein al Farisi.

The instrument seems to have been known in Italy in the years just before the Renaissance, for Muratori tells us that Leon Battista Alberti produced wonderful coloured pictures in a small box with a little hole in it, about the year 1437; and just a generation later we come on surer ground, and find the "camera obscura" described and depicted in the great note-books of Leonardo da Vinci. I am writing these lines in the very week in which Italian scholars are celebrating the four hundredth anniversary of the death (May 2nd, 1519) of the great scholar-artist. Paying him our own petty tribute, let us listen to part at least of what he has to say about this subject of ours. In one of Paris MSS. (I take my figures from the Ravaisson-Mollien *facsimile* in the British Museum) he deals with the Aristotelian problem of a luminous body sending its rays through a small hole on to a screen beyond; and he shows how, when the pinhole is near or close to the source of light, it is the hole which shapes the image, but when it is farther away then it is the object itself which is projected on the screen. The figures are clear enough, but Leonardo's strange back-handed writing is hard to read (for it was his usual habit to write *backwards*, as though he were writing Arabic or Hebrew). Mr. Gilson, of the MS. room at the Museum, has helped me with the transcription, and the old Italian is not hard to understand. Leonardo's account of the phenomenon is all too brief; it was only after he died that a very remarkable man, Francesco Maurolico of Messina gave a full and clear and correct solution of Aristotle's problem.

One more drawing I copy from the great "Codice Atlantico," the most famous storehouse of Leonardo's manifold erudition. It is a plain and simple diagram of a camera obscura—a pinhole camera. A lamp (p) illuminates the picture (at ox), and the inverted image is produced at rs by the rays which have passed through the pinhole.

But there is yet another word to be said before we pass on. We all know how much the Italian scholars of the Renaissance learned from the poor Greeks who escaped from the wreck of Byzantine civilisation; but we know far less of the science than of the scholarship that came westward about the same time and earlier still. We catch a glimpse of it here. For we happen to know from Leonardo himself that his friend Cardano possessed a MS. of Al Kindi's work, translated by Gherardo of Cremona, and we know, again, that Leonardo was acquainted with Ibn al Haitam's book also; and, lastly, there are some of Leonardo's notes and drawings which suggest, and perhaps prove, an acquaintance with Kamal al Dinal Farisi. Leonard was as erudite as he was original; and through him and a few of his contemporaries a little stream of science was flowing into the Western from the Eastern world, just as it had

done in the days of Roger Bacon and of his contemporary Joannes Peckham, one of the many learned, but few scientific Archbishops of Canterbury.

It is said that a lens was first applied to the camera by Daniel Barbaro ("La prattica della prospettiva," 1568, page 192); but about one and twenty years later the instrument, both with and without its lens, is fully described in the well known "Magia Naturalis" of Giambattista della Porta.

The original "camera" was a darkened room, "camera obscura," hence the name we use to-day, and the observer was *inside* his camera; it was in precisely such a darkened room that these photos of Lord Rayleigh's were made. But the schoolboy, when he wants to make a pinhole



A CEDAR IN LORD RAYLEIGH'S GARDEN.

"camera," makes it of a little box, as I used to do many years ago. You take a large pill-box, replace the bottom of it by a bit of ground glass or even a piece of tracing paper, and make your pinhole in the lid. As soon as you hold it in front of a brightly lighted object, for instance the window frame, you see its image on the tracing paper or the ground glass. The schoolboy presently finds that it is of no small importance to blacken the box inside, so as to prevent the reflection on to the image of scattered rays from the sides of the box, and also to screen the plate from outside illumination, as the photographer does when he draws the cloth over his head; for these two precautions are needed to make the "camera obscura." Beyond this the ordinary pinhole camera does not go; but, as Lord Rayleigh has shown, there are some other things to be considered, and these things soon lead us

into mathematical considerations where we can only follow a very little way.

The whole question would be simplicity itself (and very much as I have stated it) were it not for the fact that there is no "single" ray of light passing through the pinhole, and that there is, in general, a slight difference in the length of the path of the light passing through different points of the pinhole. It is a well known fact that the resolving power of a lens (*i.e.*, its power to separate, or to prevent from overlapping, the images of two neighbouring radiant points) depends upon aperture; and focal length does not enter into the case. But there is another side to the question of definition, where focal length does enter in. The rays arriving at a focal point from different parts of the aperture, having travelled different distances, tend to arrive in different phases (a difference which it is part of the function of our modern lenses to correct); and with short focal lengths the relative difference of path will be great, but as we lengthen the focus it will diminish, and it will at last become immaterial;

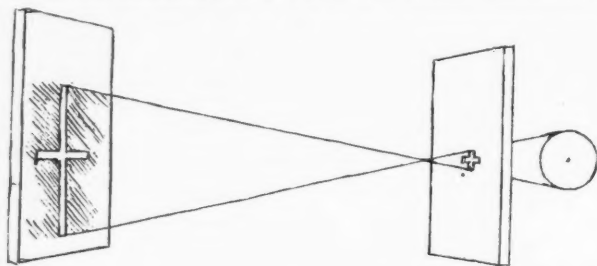


FIG. 1.—Leonardo da Vinci's figure of a luminous body placed close to an aperture and projecting an image of the aperture on a screen. "El raso luminoso passata perichulo spirachulo crotto in propinqua opositione la stampa della sua perchussione fia piu simile allo spirachulo . . . donde passa c'a' tampo luminoso donde nasce."

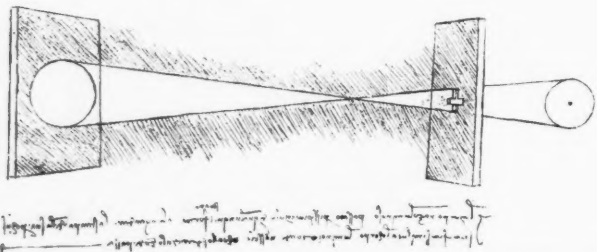


FIG. 2.—The luminous body placed at a greater distance and projecting an image of itself through the aperture. "Il raso luminoso passato periss pirachulo di qualunque strana forma alungandare lastampa della sua perchussione fia simile alchorpo luminoso donde nasce."

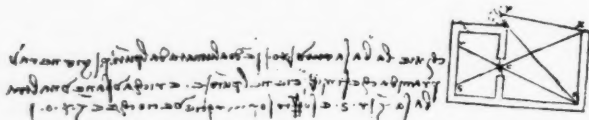


FIG. 3.—A pinhole camera after Leonardo. "Chome la basa x.o sendo alumata dal punto λ genera una piramida che finissae nel punto c. e richavane un'altra basa in rs, e sopra ricieve cio che e in xo."

for, as Lord Rayleigh himself has shown, a difference in phase which amounts to no more than a quarter of a wave-length produces no sensible deterioration: "so that, from this point onwards, the lens is useless, as only improving an image already sensibly as perfect as the aperture admits of." We might therefore construct a telescope of any degree of resolving power without an object-glass at all, if only there were no limit to the admissible focal length; but this curious proposition loses its practical value, for the necessary focal length would soon become very great indeed. For, with any given aperture (of radius r), and with light of a given wave-length λ , it can be shown (see Lord Rayleigh "On Pinhole Photography," *Phil. Mag.*, February, 1891, page 88) that the focal distance (f), at which the phase-difference becomes less than $\frac{1}{4}\lambda$, is given (approximately) by the equation, $f_1 = 2r^2/\lambda$. So, if we take an aperture as big as the pupil of our eye, say, 1.5 in. in diameter (r being therefore 1.0 in.), and take λ to be, say, 1.40,000 in., we should find $f_1 = 800$ in., or about 66 ft.

The accompanying photographs from Lord Rayleigh's garden were made with a "pinhole" measuring .07 in. in diameter, *i.e.*, about 1-14 of an inch, an aperture enormously greater than what we usually think of when we speak of a "pinhole camera"; in other words, an instrument of immensely greater power has been here employed. From the above equation, we may now find f at once: save only that we might have to modify our value for λ according to the average value of the wave-length of light we propose to use, *i.e.*, according to the colour of our object. But, taking the value which we have already assumed for λ , we have $f = 2r^2/\lambda = 2 \times .035^2 \div 1/40,000 = 80,000 \times .0012$ in. = 8 ft.

As a matter of fact, the focal length employed was somewhat less than this, viz., about 7 ft.; that is to say, these photographs were taken in a darkened room, or true "camera obscura," with an aperture in the window-shutter of about 1-14 in. in diameter, the image being thrown on to a photographic plate some 7 ft. from the aperture; and the actual photographs so taken were 12 ins. by 10 ins. Such photographs held at 7 ft. from the eye would appear in natural magnitude; at a less distance the object is seen magnified, but even at 3 ft. or 4 ft. (as Lord Rayleigh says) the definition is sufficiently good.

It is, perhaps, worth while to mention, though, indeed, it is sufficiently obvious, that in order that the rays may travel freely through the "pinhole" in all directions the hole must be bored in a thin plate—not through the thick wood of the window-shutter. Accordingly, Lord Rayleigh first made a big hole in the shutter, fitted to it a thin metal plate, and drilled his pinhole in that. Now, this is precisely what Gianbattista della Porta had done three and a half centuries before, and Lord Rayleigh might have been following his instructions to the letter. "Close all your windows," says Porta, "and bore a hole as big as the palm of your hand in one. Fix over it a sheet of lead or brass, as thin as paper, and in the middle of it make your 'pinhole'." And, what surprised me not a little to read, it was quite a large "pinhole" that Porta used, larger even than Lord Rayleigh's, a hole as big as the tip of your little finger—"in cujus medio [*i.e.*, in medio tabellæ æneæ] foramen aperias circulare, digiti minimi magnitudinis," etc. Porta's camera and Lord Rayleigh's must have been as like as two peas! It is a pity that Porta does not tell us what focal length he used. My little finger measures at the tip rather more than a third of an inch in diameter, but the slender hand of the Italian was probably a good deal less than mine. Call it a quarter of an inch, and the requisite focal length (according to our formula) would be just about 800 ft. Now, Porta speaks of his room as having many windows, and a large room or gallery in an Italian palace or monastery would give the 800 ft. quite easily; so it may well be that Porta's big "pinhole" was well adjusted after all, and that he had found out by trial, approximately, the proper ratio of aperture to focal distance which has only now, of late, been demonstrated.

The naturalist takes an interest of his own in the pinhole camera, and every physiologist is obliged to understand something of the lens camera. For the eye not only of man, but of all vertebrate animals and of many other animals besides (and notably the common kinds of cuttlefish), is built precisely on the lines of a photographer's camera. It consists of a little cartilage box, which we call the "sclerotic"; it is furnished with a "lens," and the lens has its focussing adjustment and its "iris" diaphragm; there is a sensitive plate, which we call the "retina"; and the little box is blackened with a dark pigment all round within. This correspondence between the eye and the camera obscura, by the way, was first shown by that learned Sicilian, Francesco Maurolico, of whom we have spoken already, and Kepler demonstrated the exact analogy. A very, very few animals have an eye constructed on the other principle, that of the pinhole camera; and the most perfect example by far is found in that strange and ancient creature, the Pearly Nautilus. I can find no precise measurements of the Nautilus' eye, nor so far as I know has it ever been studied in the living animal, but only in preserved and shrunken specimens; but let us suppose that it measures half an inch in diameter—which is probably somewhat over the mark. Then, again using Lord Rayleigh's formula, it would follow that the aperture should be a "pinhole" of 1-20th of an inch in diameter, and this seems a satisfactory value, so far as we can judge from the figures and descriptions in the books, and from the anatomical probabilities of the case. With such dimensions of the eyeball and with such an aperture the little eye, simple as it is, should be a good and efficient organ from the optical point of view.

IN THE GARDEN

THE IRIS OF JAPAN.

THE pictures from Japan showing wide stretches of this delightful iris half submerged at flowering-time gave rise to an impression in this country that the water-side was the only place suited to this iris. It should, however, be more generally known that the iris of Japan, *I. Kämpferi*, is far more amenable to ordinary border cultivation than is usually supposed. Some of the finest flowers we have seen—quite 12 ins. across—were grown in the open fields in Colchester. In Japan these irises, are grown in low-lying ground, where when needed in hot weather, the fields are flooded as occasion may arise. The roots are comparatively dry in winter and swamped in the summer. On light soil, such as that at Wisley, the ideal situation for this iris is at the margin of a pond or stream, exposed to full sunshine. On the other hand, where the soil is of a heavy nature water may be distinctly harmful or even fatal to success.

The illustration of Japanese irises on the margin of a lake that accompanies these notes will afford some idea of one of the many beauties of the Royal Horticultural Society's garden at Wisley in late June and in July.

GOAT'S BEARD (*SPIRÆA ARUNCUS*).

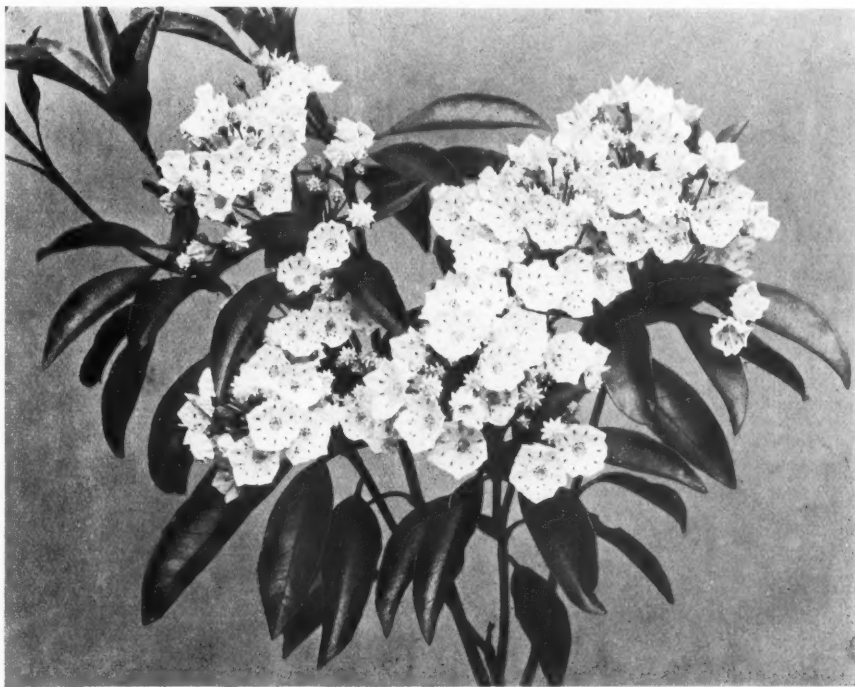
At the time when the iris of Japan is out the goat's beard is also seen at its best. In a manner they are companion plants, though they are best kept to themselves in large masses. The goat's beard is a lovely plant, beautiful in nature and easy to cultivate. There are many fine forms in cultivation, though it is no doubt, owing to the room they occupy, they have been somewhat neglected by nurserymen. The flowers are freely produced in large, gracefully drooping plumes. It will thrive almost anywhere along the sides of garden paths or, like the British meadow sweet, along the margins of a stream. It does best in a deep moist soil. In the accompanying illustration it is seen in full flower by the pathways leading to lake and woodland. The scene, as many will recognise, is in the original garden at Wisley, which has been preserved in its beautiful form. No other part even of the same garden has the charm of the water and woodland garden of Wisley.

THE KALMIAS.

Among the many beautiful shrubs within the family *Ericaceæ* the kalmias are prominently important. The two species that chiefly concern us in garden use are *K. latifolia* and *K. glauca*. By the middle of June *K. latifolia* is at its best, and is all the more welcome because, after the wealth of bloom of the four preceding weeks, there are comparatively few shrubs in flower. It grows into a handsome bush, 7 ft. to 8 ft. high; it thrives in cool or even moist peat, but to flower well should have its head in the sun. It is a delight to observe closely the lovely form and marking of the individual bloom. Not only is this kalmia a fine object in the garden, but it is of much value as a cut flower, with its charming form and air of refinement and its pretty colouring, varying from a pale to a deeper pink of excellent quality. *K. glauca* is a much smaller shrub, not more than 2 ft. high, and of upright habit; it flowers about six weeks earlier. Both are natives of Eastern North America.



GOAT'S BEARD *SPIRÆA* BY WOODLAND PATHS.



KALMIA LATIFOLIA.



JAPANESE IRISES ON THE MARGIN OF A LAKE.



A GENERAL agreement among intelligent people as to what may or may not be rightly done in the matter of the restoration of ancient buildings is not to be expected. Mid-Victorian restorers, as we now know, accomplished frightful damage when they thought themselves to be beneficently operative. Their idea was to make an old building "as good as new" in the form in which it might be supposed to have been originally built. To this end they did not hesitate to destroy the accretions of successive centuries in the endeavour to bring the building back to its supposed original form, or, even worse, to the form its first builders may be supposed to have intended. Salisbury Cathedral is a sad example of the application of this theory.

Against it William Morris led a crusade which erred by going to an opposite extreme. Pleased by the picturesque effect in some cases arrived at by the haphazard additions and repairs of different periods—a window cut in here, a porch added there, a new wing thrown out in the style of its own day, and so forth—Morris claimed that whenever repair to an old building was needed it should be done in the style current at the moment. Were an old traceried window

ruined, you must not re-establish it in its old form, you must fit in a new window of your own day's type. On this theory the repair of an old house far advanced in decay would be impossible.

The best modern practitioners proceed neither on the one principle nor on the other. For them an old building that is to be repaired is primarily a beautiful thing and, if a house, an abode that is intended to be lived in by people desiring comfort as well as beauty. It is for the repairer to see first that whatever of fine old work survives is preserved *in situ*, that whatever of new work is added shall harmonise with the old and combine with it to the production of a beautiful whole. So long as what is old and fine is preserved, and what is new is beautiful, harmonious, and convenient for use, it is now generally held that justice has been done. The restoration of Crowherst Place for the Duchess of Marlborough by Mr. George Crawley is of this latter kind. No one can deny the beauty of the result. No one can hesitate to pronounce the house as it now stands an abode comfortable to dwell in. Yet the work of repair that has been done, so far from disguising the history of the building, makes the various stages of that history more evident to the



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THE GREAT HALL.

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THE HALL ORIEL.

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DETAIL OF ROOF OF HALL.

"COUNTRY LIFE."

eye than they can have been when the condition of the house had fallen to its lowest degradation.

When John Gainsford bought the property in 1423 there were two crofts upon it. Mr. Crawley thinks that he has found some remnants of one and perhaps both of them included in the present building. Thus the wall which still

mouldings on the north and south sides are at different levels indicates the pre-existence of some disturbing element. Soon after 1423 the Gainsford house was built, and there are indications that it was added to and altered at one time and another. The core of the fifteenth century mansion was, of course, the great Hall, which still exists



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THE HALL ROOF OF 1423.

"COUNTRY LIFE."

separates the Great Parlour from the Hall was at one time an outside wall of wattle and daub, its hatched outer face being on the Hall side. This may have been part of one of the crofts. Remnants of the other may perhaps remain among the walls on the other side of the Hall. The fact that no two sides of the Hall are parallel and that the great

substantially as built. Our photographs display its admirable roof and enable us also to discover how it was ventilated by a *louvre* through which the smoke escaped from a central hearth. There was no fireplace in it till a century or two later. A massive oak seat runs along one side of the room behind what was the dais end. The screen at

the opposite side is gone and has been replaced by a modern wall. There was also originally an oriel window, probably rectangular on plan. This had utterly disappeared. It has been replaced by a new semicircular oriel fashioned of teak—an admirable piece of woodwork which should last for ages. There was also a porch admitting to the passage between the screens and the wall containing the doors leading to the offices. Enough indications remained to show not only the size but also the character of this excrescence. It was built of timber. It had an upper storey, which assuredly contained the ladies' bower, massively panelled. It was possible, therefore, to replace the old work with a modern equivalent, not exactly reproducing what went before, but of the same dimensions and like type, perfectly harmonising with its surroundings.

The original kitchen, buttery, and pantry have long disappeared. Their site is occupied by the present dining-room, a passage leading to the modern kitchen, and a flight of stairs. There are four original doorways in this passage: that to the east leads and always led to the kitchen; the



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A BEDROOM.

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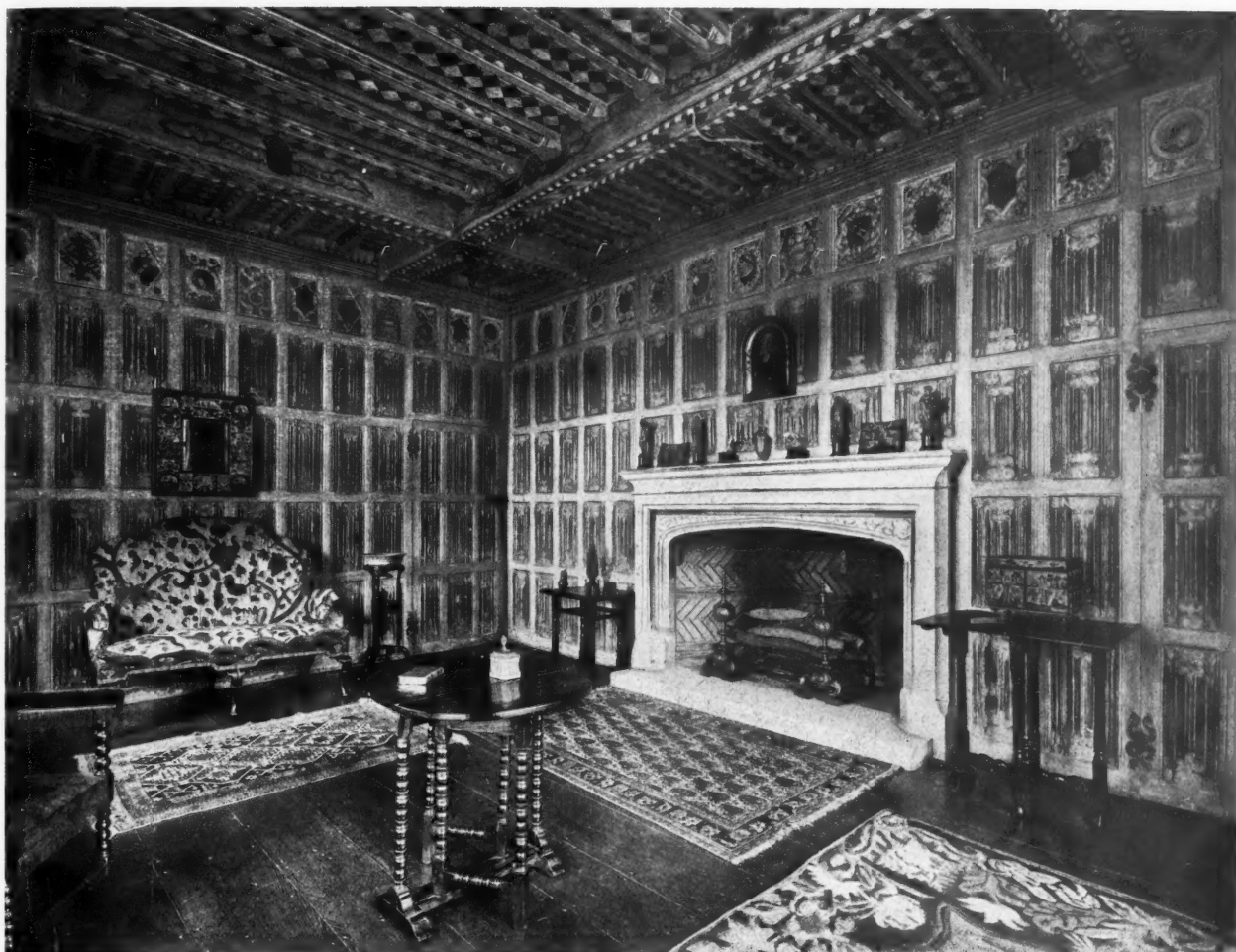
next opened on to the staircase removed by a former tenant when he made the little room now the dining-room: the third and fourth probably gave access to a cellar and the buttery, where now is a bathroom. The dining-room fireplace is a massive brick structure of the seventeenth century. Within its ample extent a brick oven was probably included after the local fashion. Here, then, may have been the original kitchen or pantry, for mediæval pantries often



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THE GREAT PARLOUR.

"COUNTRY LIFE."



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THE DUCHESS'S PARLOUR.

"COUNTRY LIFE."

contained fireplaces. Whatever the original arrangements hereabouts may have been, they had been so much altered to suit the needs or whims of successive generations that it was impossible, even had it been desired, to re create them. The interior, therefore, of all this end of the old house has been re-made to suit modern requirements without in any way disturbing the outside aspect or the structural lucidity of the building. Alongside of the dining-room is a bathroom, and behind them both the aforesaid kitchen passage and staircase.

Almost the whole of the service wing beyond—that is to say, the north wing—is newly built. It occupies the site of old chambers and includes the lower parts of old stone walls delightfully mellowed by time. They abut directly on to the moat, which is here crossed by a foot-bridge leading into the kitchen. The over-riding upper storey is of half-timber work. One of our photographs gives an excellent idea of the aspect of this end of the house and amply justifies the architect.

Returning to the main passage through the house from the front porch, we note that it opens at the

back or east end into another porch, a wholly modern addition. The original house stretched back in this direction, as existing foundations prove, but there is nothing to show the purpose or character of this wing, and its site is now covered by lawn. All the east end of the great Hall is modern. It includes the fireplace of the sixteenth or seventeenth century with its great beam, over which is



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THE DUCHESS'S PARLOUR.

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THE DUCHESS'S BEDROOM.

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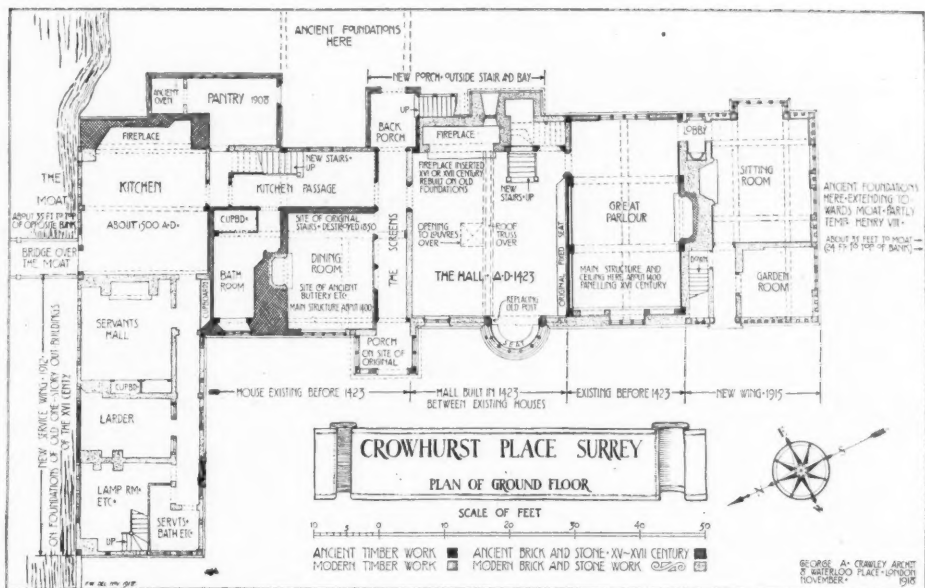
THE OLD PANELLED BEDROOM.

"COUNTRY LIFE."

fastened a fragment of chain-mail that was found in the oldest piece of walling above mentioned. Behind and beside the fireplace very picturesque modern staircases have been contrived. The general aspect of this end, as indeed of the whole of the Hall—a most admirable room—is well seen in our illustrations. It should, perhaps, be mentioned that the original massive moulded posts with the mortices for an oriel window still remain at the east end of the Hall. There was a similar window in the west end—a most unusual arrangement.

The dining-room depends for its charm upon the excellence of its woodwork. The stone fireplace of Tudor design is new and well proportioned to the room. Some of the fine linen-fold panelling belongs to the house and was found in the bedroom over the Great Parlour, though it was not originally made for that position. In the days when linen-fold panelling was in fashion people carried it about from one house to another like so much furniture and adapted it as the form of an existing room required. What was lacking in this case was made anew to match, and very well made. The original heavily beamed ceiling is a necessary factor in the fine general effect.

The Great Parlour on the other side of the Hall is likewise an oak-panelled room. The stone fireplace is old, and so is the Sussex fire-back of cast-iron with the initials of a John Gainsford. It dates from about 1600. The heavily moulded beam ceiling is original. The panelling over the fireplace was found in the room overhead. There were some remains of a carved frieze with badges of the Gainsfords round the walls above sixteenth century panelling. Behind



Copyright.

GROUND FLOOR PLAN.

"COUNTRY LIFE."

the fireplace access is obtained through a decorative little lobby of modern construction to a smaller sitting-room. This and the adjacent garden-room form together a southward extension of the house. They and the rooms above them are entirely new-built. They occupy part of the site formerly covered by buildings which extended in this direction as far as the moat and appear to have dated from about the time of Henry VIII. The little sitting-room with its lining of faintly coloured and patchily gilt linen-fold panelling of a French type is indubitably picturesque; the walls, frankly "faked" to look old, or rather to present the peculiar quality of colour and surface generally produced by age, are more charming than the ceiling, which lacks their delicacy of colour. The effect of the whole room is certainly agreeable. It has the aspect of a pleasant retiring place, where one might read or dream in peace through the quiet hours of a summer day. MARTIN CONWAY.



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THE DINING-ROOM.

"COUNTRY LIFE."

LITERATURE

A BOOK OF THE WEEK.

The Venerable Bede: His Life and Writings, by the Right Rev. G. F. Browne, D.D. (S.P.C.K.)

DR. BROWNE'S first history of the Venerable Bede was published in 1879, and the present edition is a thorough recast and enlargement of that book. It is a fascinating volume, with outlook in many directions. The casual reader, even though he were a student of current literature, would scarcely think of opening its pages for the purpose of finding a contrast drawn between Anglo-Saxon art and Celtic art. Yet that forms one of the most fascinating parts of the volume. It comes in this way. The Venerable Bede's most human, if not most important, writing was his "Life of Cuthbert," the ascetic and sainted Bishop of Lindisfarne in the seventh century. Now, the author is not only an expert on ecclesiastical history; he is also a keen antiquarian. He could not well be otherwise, since he was Disney Professor of Archaeology at Cambridge between the years 1888 and 1892. Naturally, then, he is keenly interested in the relics connected with the Island story. He gives an excellent plate, showing the Pectoral Cross which was found on St. Cuthbert's breast when his grave was opened in 1827. Also, he shows the portable altar which was buried with him, and the beautiful stole found on his body and the robe prepared for the translation of the body to the new Cathedral Church of Durham. These robes are held to be the work of the Arab weavers of Sicily, and were presumably made between 1085 and 1104. When the Danes ravished Lindisfarne the monks carried off with Cuthbert's body the two great treasures of the island, that is to say, Bishop Ethelwold's Cross and the Lindisfarne Gospel. This famous and beautiful book was, according to its colophon, written by Eadfrith, who was Bishop from 698 to 720, "for God and the holy Cuthbert and the saints that are in the island." Ethelwold, who put up the stone cross, made it firm outside and bound it as firm as he could. Dr. Browne's description of the pages of the book is too long for quotation, but will well repay reading by any who are interested in such things. What we have to do with at the moment is the conclusion at which he arrives. It is that the whole is Anglo-Saxon work, not Irish:

The basic motives are similar, or come from the same source or from cognate sources, but the working out of the motives is Anglian, not Celtic.

In fact, we have here a wonderful exemplification of the power the race which was to become the English race possessed for assimilating and welding into its own individuality whatever it came into contact with. Our very early ancestors had, during the Roman occupation, learned something of the steadiness and rationality of Imperial Rome. They even got the fundamentals of law from the invaders. Yet they kept independent of them. No doubt the Roman army of occupation was composed of a very miscellaneous collection of recruits raised in the countries which Rome had conquered, and Asturians, Batavians, Gauls, Spaniards, and so on, all occupied stations on the Wall. But neither they nor the Romans were able to impress their character on the natives. So it was in the palmy days of Lindisfarne. Inspiration had originally come from Ireland by way of Iona, but monks like Cuthbert, who belonged to Melrose, were able to take what they wanted from their Celtic brethren, and without becoming like them. The Book of the Gospels illustrates this wonderfully. To quote our author again:

To study the stately illuminated pages of the Lindisfarne Gospels, and then to pass immediately to the study of the Irish Book of Kells, is to pass from order to chaos. Splendid as that Book is in design and colouring, there is lacking almost throughout the evidence of a master mind, intent upon securing balance and producing an effect of perfect continuity and equilibrium. There are endless pieces of beautiful pattern; but not so arranged as to give harmony to the page.

Dr. Browne, perhaps unconsciously, gives a cue here to literary criticism. The ancient literature of the Celts is exactly like their ancient art. It has passages of surpassing loveliness, but along with the gold there is a great deal of clay and a noticeable absence of that mental domination which is able to fashion its material to one fine and stately purpose. A page of the Lindisfarne Gospels might be taken as an emblem of English literature, and a page of the Book of Kells as an emblem of Irish literature.

It must not be thought, however, that the charm of the book depends upon this, which is but an incidental episode. It lies rather in the sympathetic and intimate rendering of the very interesting men who, through the North

Country, fashioned the spiritual nature of Great Britain in those dim and distant centuries. First and foremost comes the Venerable Bede himself, perhaps the most attractive type known of the monastic recluse who had seen little of the world and learned about it only by his divine gift of sympathy. Often historians have dwelt on that wonderful account of his death in a letter written by an eye-witness, Cuthbert, one of the Jarrow monks, to his friend Cuthwine. His sickness came in the season of Lent, and though his bearing was that of a noble confidence, what he chanted was: "It is a fearful thing to fall into the hands of the Living God." He used this as a text to urge his pupils to prepare for their last hour. How affecting, too, is that anecdote telling how he sang the Antiphon:

"O King of Glory, Lord of all Power, who didst on this day ascend in triumph above all the Heavens, leave us not desolate, but send to us the promise of the Father, the Spirit of Truth; Alleluia."

At the words "leave us not desolate" the dying man burst into tears and wept for a long time. He kept up dictating to his coadjutors till the very end, and in the midst of his illness he thought of certain things he would like to give to his friends before he died. So he sent Cuthbert for them, and in this way we get a little picture of the treasures belonging to a faithful monk of that time. What he had in his chest were pepper, napkins and incense. He died as he breathed the last words of the "Glory be to the Father, and to the Son, and to the Holy Ghost." Such was the biographer of Cuthbert, who was buried in Cuthbert's coffin. Cuthbert died in the year 687, when Bede must have been a little boy of thirteen or fourteen at Jarrow. The distance is not great between the two places, and no doubt the small novice had his ears filled with stories about Cuthbert's sanctity. He must have grown up in the spirit of discipleship to him. It was a time when miracles were believed in, and the life of St. Cuthbert is full of references to extraordinary, and what many would say impossible, occurrences.

His end is described in a way that reminds us of John Bunyan. He was taken ill on the Farne Island, to which he was accustomed to go for prayer and fasting. He gave one message to the monks.

Then he ceased to speak or think of this world. He passed the time till evening, and on into the night, in quiet and prayerful expectation of future bliss. Before the dawn of day he strengthened himself for his departure by the Communion of the Lord's Body and Blood. He raised his eyes and hands to Heaven, and breathed out his soul.

With this quotation we may end our notice of a book which will only be fully appreciated by those who read, mark, learn and inwardly digest it for themselves.

Mary Olivier: A Life, by May Sinclair. (Cassell. 7s.)

IT is not often that the disciple is greater than the master; but this seems to be what has happened in the case of Miss May Sinclair and Miss Dorothy Richardson. Miss Richardson's influence permeates unmistakably Miss Sinclair's new novel, yet it appears, not as a slavish livery, but in the form of a decoration easily and perhaps impermanently assumed by one who has no real need of it. So little need has the author of, say, "The Combined Maze" for anything not her own that one wonders a little to see her in the guise of a borrower; and yet that very fact is perhaps the explanation. For Miss Sinclair is, above all things, an artist, and therefore suffers the artist's everlasting craving to improve upon herself. In the course of this quest for the ultimate perfection, she is at the moment experimenting with Miss Richardson's manner—trying her on, so to speak, as other women try on hats, to see whether she suits. And she does—within limits. For this method, which is one of lightning impressions of direct physical and emotional sensation, is very suitable to descriptions of infancy, childhood and adolescence (the first three parts of *Mary Olivier*), but it is less suitable to maturity and middle age (the last two). As our mental and spiritual horizon widens with time, even our way of receiving impressions alters; we attain to a sense of proportion—and pay for it with a corresponding loss of vividness. Things which once would have stood out singly and sharply against the surrounding darkness of our inexperience take their place as parts of a gradually unfolding landscape. It is of no use to ignore or deny the change; yet that, surely, is what this method does. When Mary Olivier, for instance, aged four, falls down and cuts her forehead, we are told, "The pain made her feel good and happy; and Mamma was calling her her darling and her little lamb. Mamma loved her. Jenny loved her." That is admirable, because it chimes in with all our memories of what it was to be four and to cut ourselves and to be appeased and thrilled by a flow of exceptional caresses. But when a moment in the life of Mary Olivier, aged thirty, is described thus: "Mamma was planting another row of asters in the garden in the place of those that had died last September," we feel that some virtue has, certainly gone out of the method; we are being asked to believe that those asters stood out as the one fact in the universe—which is to ask us to believe that Mary Olivier has never grown up—which is absurd. Nevertheless, this is a book that has to be read. Miss Sinclair has force, passionate sincerity and a lovely mastery (despite all experiments) over her tools.

NATURE NOTES

PEREGRINES IN THE WEST OF ENGLAND

YOUR readers will have heard with great regret of the sad death of Dr. Wigglesworth owing to an accident, the precise nature of which is unknown, while investigating the nesting haunts of peregrine falcons on the cliffs near Porlock. I know well the place where the sad fatality occurred. It is a wild and fantastic stretch of cliff, grass at the top, but descending abruptly to precipitous crags, and below that a rubble of screes and rock fragments. Most of the cliff face is rotten and crumbling, and there have been numerous landslides. In such a place a mishap might easily occur from rock falling from above or giving way beneath.

In the year 1914 I discovered the peregrines nesting there. The eyrie was in a niche formed by three slabs of rock, the fourth side lying open to the sea. Above were steep, grassy slopes; below an almost precipitous drop of over 100ft., though in places the cliff side was strewn with screes and boulders. I attempted to approach the eyrie by a flanking movement. I got within 20ft. or so, but found further approach barred by a smooth rock-face with no hand or foot hold; the eyrie itself was screened from sight by a jutting buttress. While I was considering what to do next a stone, dislodged by a rabbit above, whizzed by my ear. It was difficult either to advance or retreat, as there was slithering shale below, and a steep grass gully above. I decided, as it was impossible to reach the eyrie, to climb up the gully to the top of the cliff. I could only get a hold by digging my fingers and toes into the turf, and was not sorry when I emerged to safety. Subsequently I descended to the beach below the eyrie, and from that position watched it every day for nearly a week. It contained three eyasses; they were still in down, but their feathers were growing fast. At times they would crawl to the edge of the eyrie, flap their wings, and mew plaintively for food. The tiercel remained on guard, motionless, on a pinnacle above the nest for most of the day. The feeding was usually done by the falcon between 4 and 7 p.m., and the meal lasted from twenty minutes to half an hour. I could see her come sailing above the cliffs, her heavy flight denoting that she carried a burden. She would perch on a rocky buttress some 30yds. or 40yds. from the eyrie, and, after cursing me with great verve and whole-heartedness, fly to the nest; there she would break up the already plucked quarry, and stuff gobbets down the maws of the eyasses, who scrambled over each other, keening and crying for the morsels.

The cliffs in the vicinity of the eyrie were littered with the debris of various unlucky ringdoves and tame pigeons, which evidently form the staple food of a well conducted peregrine nursery. I saw one pigeon skulking in a small cave not far from the nesting place, and from his reluctance to be dislodged, I concluded that he had had unpleasant experience of peregrines' ways, and did not wish to repeat the dose. Quite near the eyrie a pair of jackdaws were nesting; I was rather surprised at their presence being tolerated. I saw the tiercel stoop at one of them once; there was no damage done; but the furtive, "thank goodness that's over" way in which the jackdaws slipped in and out of the nesting hole made it pretty obvious that they had found their arrogant neighbours not too pleasant. Perhaps the peregrines had an eye on the jackdaw fledglings in case the pigeon supply should fail.

Ten days later I learned that the eyrie had been approached from above by two men, who, though unable to reach it, let down a cord with a noose at the end of it and drew up one of the eyasses by the neck. I made a last visit and saw another eyas fully fledged, perched on a pinnacle near the nest; she was a falcon by her colouring, and I watched her, "in maiden meditation fancy free," pecking absent-mindedly at what had once been a pigeon. I was on the cliffs again in April, 1916, and found the peregrines nesting, this time in another old raven's nest, even more inaccessible than the former eyrie. The falcon was sitting, and I got close enough to see her turn her eggs.

ERNEST BLAKE.

SOME NOTES ON YELLOW AND GREEN BIRDS AS SEEN ON A SUNNY AND A DULL DAY.

Though one seldom hears of the grey wagtail (*Motacilla Melanope*) except when the common pied wagtail (*alias* dish-washer) is erroneously referred to, yet it is by no means a rare bird with us in East Somerset, though as a rule it is more solitary in its habits and fonder of water than the pied, and for that reason is perhaps the less noticed, in spite of its somewhat unusual colouring; it is also brighter than many of the birds to be observed in winter and early spring.

But to realise its full beauty and not to pass it by as a mere pied wagtail it is necessary to see it with the sun's rays full upon it, and then at once the perfection of its colouring and the gracefulness of its every movement will attract attention. I was fortunate in seeing one last February, on one of the few sunny days we had. It was standing on a stone in the middle of a tiny sparkling roadside stream with silver palm keeping guard above, while the water plants in the stream and the young

green shoots and early primroses on the bank formed as beautiful a setting for the bird as the most exigent could desire.

If, however, the sunlight is essential for full appreciation of the grey wagtail, it is far more so in the case of such birds as the greenfinch and green woodpecker. These, on dull days, are apt to look a very dreary green, specially the former. Just before I came upon the grey wagtail I had noticed a great number of yellowhammers enjoying themselves immensely on a neighbouring farmer's cornstack. But I soon noticed that they were not all yellowhammers, but that many had exceedingly brilliant wing feathers—unlike the yellowhammer—and then I looked again and saw that they were cock greenfinches. The sunlight on their breasts and wings made them look quite as yellow as the yellowhammer itself. I could not have made such a mistake on a dull day. I have often noticed a green woodpecker looking almost golden when flying on a sunny day, not in the least bit green.

Sunlight seems to have far more effect on yellow and green birds, especially on the latter, than on birds whose colouring is chiefly browns and reds. For instance, a bullfinch looks its very finest on a dull day. I wonder if any of your correspondents can furnish other examples.

J. C. E. B.

THE HONEY HUNTERS.

There are two flowers in the garden which, just now, have peculiar attractions for honey hunters such as bees, butterflies



HUMBLE-BEES ON A HONEYBALL.

and moths. One is the beautiful golden orange ball which is the flower of *Buddleia globosa*, familiarly known as the honeyball, and the other is the spur valerian (*Centranthus*). All day long in the sunshine the neighbourhood of the former is noisy with the hum and the drone of innumerable humble-bees clambering over and round the orange balls, extracting their free meals of honey; and it is pleasant to see them enjoying themselves, for your "bumble-bee" is regarded with friendly feelings by us all. When we hear the angry shrill buzzing of a tigerish looking wasp dancing up and down the window pane in a frenzy of rage because it cannot get through the transparent but solid obstacle of the glass, we arise to slay it; but when the deeper note of a bewildered "bumble" sounds we get up and help it out with a handkerchief into the liberty of the open window. Of the ordinary hive bee we are just a little afraid, for it is rather too ready with its sting; but the humble-bee we look upon as a big, blundering, good-natured creature. He is a sort of Dr. Johnson among the bees; he growls and booms about, he is a bit obstinate when we are trying to help him out of a difficulty, but there is no vice about him, and therefore we are glad to see him enjoying his life.

F. C. G.

THE ARTIFICIAL FLY IN WATER.

While your Editorial Note will undoubtedly express the feelings of many fishermen on reading the article by Mr. Rogers, there is certainly a substratum of truth in some of his remarks. To one whose experience, though limited, is entirely self gained under varied circumstances, it seems that trout will take almost any fly when "feeding hungry," whereas it takes a tempting fly, nicely presented, to rise a fish when conditions are not ideal.

The artificial fly presents a different appearance immersed and when pulled out of the water. Skilfully handled, he is no bad imitation of the real thing drowned. But if dragged across or against the stream he does not resemble a fly, and if taken under these conditions, it must be in the belief that it is a fresh water shrimp or some such form of aquatic insect life. A fish may sometimes be killed in this way when he will not rise to the fly offered in the usual manner. Again, I speak subject to correction from the more experienced—surely a fish takes the artificial in preference to the real fly because the former is less trouble and an easier mouthful, and *not* because he imagines the maker's counterfeit to be an alternative food.

C. R. I.

THE LAWN TENNIS CHAMPIONSHIPS

By F. R. BURROW.



Mlle. LENGLEN, THE LADY CHAMPION.



MRS. LAMBERT CHAMBERS.

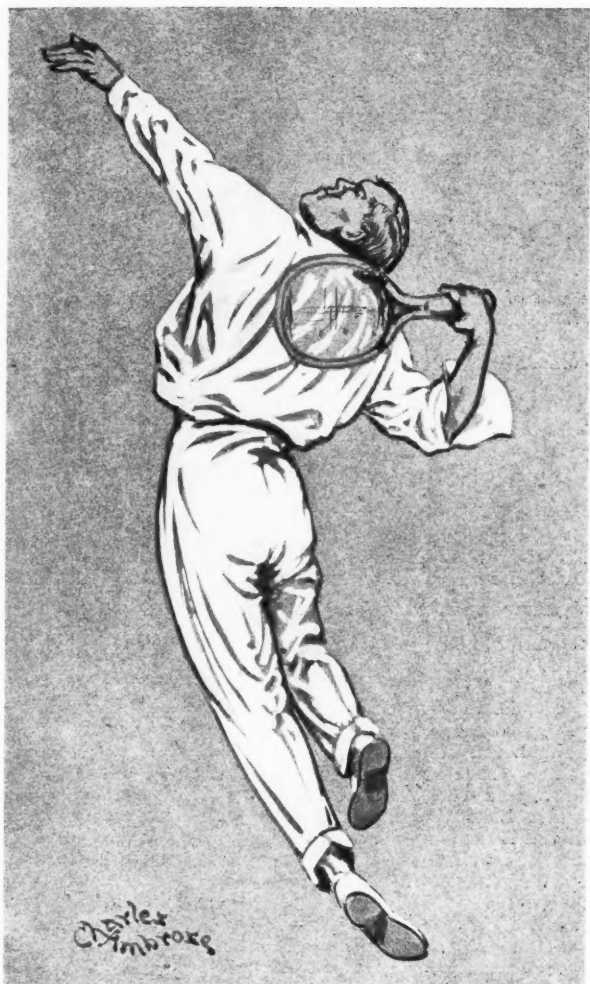
WHETHER the "Victory" Championships will go down to history as "The Wet Wimbledon" or "The Wonderful Wimbledon" time alone can tell. On the whole, I think, the latter is the likelier; for though rain played an almost unprecedented part in prolonging the meeting, there were yet features of the play which caused the thronged stands to forget all past delays and disappointments in present enthusiasm and excitement.

The Championships of 1919 differed from the great majority of their predecessors in that the winners of both the All Comers' Singles were almost taken for granted. This might seem to militate against excitement; but then—there are the challenge rounds! At Wimbledon the holders "stand out," awaiting, with what calmness they can command, the surviving hero or heroine from the long lists of the world's best players. Thus, splendidly isolated, they have every opportunity of studying the strokes and tactics of those who will at long last throw down the gauntlet to them in the Centre Court—that hallowed enclosure where every good player hopes to appear at least once before his game passes from him.

The questions, then, which were asked this year were not "Who will win the All Comers?" but "Will Patterson beat Brookes?" and "Will Mlle. Lenglen beat Mrs. Chambers?" This confidence in Patterson and the French Lady Champion was all the more remarkable because, while Patterson had already suffered defeat this season from three players all of whom were in the lists at Wimbledon, Mlle. Lenglen had never played on a grass court till a month ago. Yet the confidence was there, and it was not misplaced.

Place aux dames. Mlle. Lenglen's path to the Challenge Round was not an easy one, for she met Mrs. Larcombe and Miss Ryan, to defeat either of whom it takes the best, playing her best. Mrs. Larcombe, as it happened, was not at her best; but she herself admits that, at her best, she could only hope to give Mlle. Lenglen a hard game—in itself conclusive testimony to the strength of the French girl's game, coming from our cleverest lady player. Miss Ryan put up a strong and gallant fight; but just as she seemed to have pulled the match round rain stopped play, and she could not get going again in time. The final, against Mrs. Satterthwaite, was an easy affair. But the Challenge Round was nerve-racking. A gallant, glorious match—undoubtedly the best ladies' single ever played. No description of it could possibly do justice to the brilliance of the play or give to those who were unlucky enough to miss it even a faint idea of the exciting vicissitudes of the fight. That Mlle. Lenglen should win after twice being within a point of losing bears witness to her pluck as well as to her play: that Mrs. Chambers should lose after being twice within a point of winning claims for her a sympathy even greater than the admiration her game has always commanded. And never more than in this match; she played magnificently, and though she went down, she went down with her colours flying, and fighting to the last. Sympathy she certainly did receive: as her greatest English rival feelingly observed "If I could only have lent her *one* drop shot—!" Played before the King and Queen, it was truly a Royal game.

Mlle. Lenglen is the Lopokova of lawn tennis. She not only has all the shots, but she never, never hesitates to go for the winning one with the most refreshing wholeheartedness. She has lapses, of course; no one could possibly live for ever on the heights she attains. Indeed, if she should ever be defeated, she will not be beaten—she will beat herself. Meanwhile, the Ladies'



MR. G. L. PATTERSON, THE NEW CHAMPION.



MAJOR NORMAN BROOKES.

Championship is in fair and worthy hands. So the one question got its answer on Saturday. On Monday the other, "Will Patterson beat Brookes?" came on for decision. It was quickly settled. From start to finish there was only one man in it. And that one was Patterson. He went for his shot every time, almost contemptuously; and it came off more often than it failed. Except for a few lovely cross-court shots Brookes made but few winners; most of the points he scored were scored for him by the over-ferocity of his opponent. There was no finesse about Patterson's play. A tremendous service, a rush to the net, a neat volley or a devastating smash—that was his plan of campaign. McLoughlin over again, in fact. But it served him well. Brookes seemed nerveless, and to care little whether he won or lost. He was not the Brookes of old. Six months in hospital have told their tale. His personality, so great an asset when he beat Wilding in 1914, had no numbing effect on Patterson. It was a disappointing match; for the hard-hitting, win-or-lose, knock-the-other-man-off-the-court game which Patterson played, effective as it may be, has little interest for the spectators. It is the working-up to the winning of a good rally that gives real enjoyment to the lookers-on. There was none of that here. That Patterson deserved to win is undeniable. In time he will be one of the world's great players; at present there are probably a dozen men who would go on to a court against him without feeling that he was invincible.

But besides these two Australians, there were other Richmonds in the field from "down under." For the first time in history two Australian pairs fought out the final of the Doubles Championship, and the odd thing was that neither of these pairs was Brookes and Patterson! It not infrequently happens that two great singles players fail to combine into a good pair; and, though Brookes and Patterson were good, they were not good enough to beat O'Hara Wood and R. V. Thomas, to the surprise of many, but not of all. For Brookes, though far less grim than he was, still seems to infect his partner with terror rather than confidence. Perhaps this is only natural when the master partners the pupil: but it does not tend to the success of the side.

The great French player, André Gobert, was disappointing. He seemed to have lost interest in the game altogether. But he will return to it. And what of our home players? They did better than many thought they would. Few would have predicted that we should have two men in the last four and one in the final. But so it was. Kingscote went furthest, but Ritchie perhaps did best, being the only man to take a set—and very nearly two sets!—off Patterson. So in singles we did none so badly. Of our play in doubles it is kinder to be silent. There is not a good pair in the country, and very little sign of one to come. The Renshaws, the Baddeleys, the Dohertys—! I look in vain for their successors.



LIEUT.-COL. A. R. E. KINGSCOTE.

THE ESTATE MARKET

WEEKLY AVERAGES OF ONE MILLION

INCREDIBLE as the thing may seem to those—and there are many of them—who have not yet grasped the fact that a new spirit has come into the estate market, the average realisations have steadily risen during the last three months, until they have attained in two successive weeks the unquestionable and, in recent years, unprecedented, total of a million sterling. Towards last week's aggregate Messrs. Knight, Frank and Rutley's sales contributed £604,000, of which the largest single item was the £192,000 for Sir Richard Glyn's Dorset and Wiltshire estates, other considerable additions being £102,000 for Lord Cholmondeley's Barrow estates in Cheshire (Messrs. Frank Lloyd and Sons); some £60,000 for the Drayton Manor, Staffordshire, property (Messrs. Humbert and Flint); £92,000 for land in Derbyshire and Northamptonshire (Messrs. Daniel Smith, Oakley and Garrard); and nearly £31,000 for Lea Marston and Shenstone land, sold at Birmingham by Messrs. Winterton and Sons. Not only the county councils and the tenants, but, in the case of the last-named, a co-operative society were purchasers, and so little hesitation marked the various sales that most of our correspondents in reporting them comment on the brevity of the proceedings. The minds of the buyers are made up beforehand, and they go to the auction resolved to get what they want, and they get it. Often, too, having got it, they wind up with a hearty vote of thanks to vendor, auctioneer and solicitor for the fair conduct of the business. "All's well that ends well."

The new conditions prevalent in the market have not obliterated all the landmarks, and precedent will be followed to some extent in making August as much as possible a period of vacation. To clear the lists between now and the end of the month will severely tax the energies of agents and others, but the task will be attempted, although there will still be more than the average volume of business for the weeks intervening until the floodgates of September selling are opened.

Messrs. Knight, Frank and Rutley's sales in the last coming week include Wrenbury Hall, Cheshire, 684 acres, for Mr. K. Vere Strakey, at Crewe on Monday, and the West Riding estate of Oxtou Hall, on the outskirts of Tadcaster, 417 acres, at York on the following day. Their approaching auction of the Orleans House estate at Twickenham (July 24th) presents a favourable opportunity to a club or any company requiring a sports ground for its staff. The land is accessible from the City, and in due course should be found to have appreciated in building value.

Lord Lovelace's Surrey estate, Horsley Towers, 2,748 acres, will be sold at Hanover Square on July 29th, and on the same occasion a freehold in Kensington Park Gardens will be disposed of. Outlying portions of Lord Howe's Penn House estate, over 900 acres, will be dealt with at High Wycombe on July 28th, and other sales in the last day or two of this month will be of Essex, Berks and Isle of Wight properties, and Danesbury, the sale of the last named taking place at Hatfield on July 31st. Before that, on July 22nd at Swindon, and two days later at Lincoln, a beginning will be made with the sale of the Charterhouse estates.

The late Duc d'Aumale spent considerably over £100,000 in the erection, rather more than twenty years ago, of the palatial mansion of Wood Norton, Worcestershire, which is now for sale by Messrs. Curtis and Henson on behalf of the Master of the Rolls.

Clarence House, Roehampton, near the sports ground of the Bank of England, will be submitted on July 31st by Messrs. Chesterton and Sons. Nearly six acres of Kensington sites, at the end of the High Street, adjacent to Edwardes Square, will come under the hammer of Messrs. Leslie, Marsh and Co. at the end of this month.

THE MANTON HOUSE SALE.

The forthcoming sale of Manton House and Clatford Park, Marlborough, by Messrs. Mark Jeans and Son (announced in *COUNTRY LIFE* last week), recalls another notable auction, that of the Meux estates, which has a very direct bearing on the present event. A valued correspondent, who has known the property intimately for over half a century, writes to us this week: "My personal recollections of this property—the home of so many of the world's most famous racehorses, Sceptre, Bayardo, Lemberg, Gay Crusader, Gainsborough, Manilardo, Buchan, Bayuda and Air Raid, to name only a few of them—are that at one time the late Mr. Alec Taylor, sen., trained horses on the downs, while his stables were at Fyfield House, then part of the Meux estate. About 1865 he acquired Manton Down farm, which was more or less open down land, and erected thereon the splendid range of stabling which has since housed so many notable animals. Every detail was studied to make the place perfect for its purpose, and by the time he died some £70,000 had been expended. Since then the present world-renowned trainer has pursued the policy of improvement.

"The original property was about 470 acres, with the surrounding downs rented principally from the Meux trustees, until 1906, when Lady Meux sold the Wiltshire estates by auction. A group of farms, extending to 5,000 acres, was offered as one lot, which embraced the magnificent downs, without the use of which Manton House would have become useless as a training centre. Mr. Alec Taylor, therefore, with great foresight, decided if possible to become the owner and gave a commission to his agent, Mr. Mark Jeans of Marlborough, to exercise his judgment in purchasing. The dramatic incident at the sale, when this lot was offered and bought in, is still remembered. Many expectant bidders were waiting to buy the separate farms, when, after a hasty interview, it was announced that the group was sold and Mr. Taylor became the owner. From that time Manton increased its prosperity, and continuously increasing success has attended the stable. Some 1,500 acres of land immediately surrounding the premises, mostly down, is being attached to this portion of the estate, which will make it unapproachable in extent and value as a self-contained and combined training and breeding establishment.

"Natural surroundings, together with mature and unequalled judgment, have attained success, and whoever may become the future master of Manton may be sure of unusual facilities for achieving further success. Whatever happens, however, for Manton House to lose the genial presence of Alec Taylor, who is still a young man, would be a cause of general regret. Let us hope that, if selling the estate, he may continue for many years yet in occupation. The Clatford Park estate, which adjoins on the south side, must be well known to travellers along the London and Bath road, for nearly three miles parallel with the Kennet, which passes through it, the splendid farm-houses, the well built cottages, the pleasant meadows, the old Grey Wethers, the Devil's Den Cromlech, the glorious West Woods, old Fyfield Church and the beautiful Sarsen-built sister Church of Overton. What Old Marlburian does not know and reverence the grandeur of the old-world surroundings and the favourite haunt of his schooldays?"

SALES OF LANDED PROPERTY.

Mr. J. P. T. Jackson of Chorley has purchased the Cwm estate, of 1,314 acres, at Clunbury, Hopton Heath, 10 miles from Craven Arms, Salop. Bidding at the auction conducted by Mr. A. B. Blower (Messrs. Jackson and McCartney) commenced at £12,000, and the hammer fell at £14,500. Besides the mansion the estate includes Cwm Cottage, a beautiful black and white house, and many farms.

Mr. H. T. Pearson, late of Orlingbury Hall, Northants, is the new owner of Hadlow Castle, which Messrs. Knight, Frank and Rutley sold at Hanover Square a few days ago.

The sale of Lord Bertie's Beckley and Horton estates, Oxon, was concluded by Messrs. Franklin and Jones in less than an hour and a half, 53 lots being put up. By this time the few withdrawn lots have doubtless changed hands, and the entire result is very satisfactory. The average throughout was nearly 28 years' purchase of the present rentals of the farms, and some made almost 30 years' purchase.

Excellent business has also been done by Messrs. John D. Wood and Co., who have sold Lock House, 526 acres, at East Grinstead, for £30,000, and other property for over £10,000. For fishing rights in County Galway Messrs. J. A. Lumley and Dowell have just obtained a large sum, privately and by auction. Messrs. Bruton, Knowles and Co., Messrs. Daniel Smith, Oakley and Garrard, Messrs. Alfred Savill and Sons and Mr. Alfred J. Burrows have disposed of a large acreage during the last few days at high prices.

"THE GREAT AUDLEY."

Sir William Gull, Sir Jeffrey Wyatville, and other eminent men have lived in Brook Street, Grosvenor Square, one of the earliest having been Handel, whose association with the thoroughfare is commemorated in the Handel suite of sound-proof rooms for music in Buckland's Hotel. The famous hotel, a favourite American house, has been sold by Messrs. Collins and Collins to the Guards' Club.

Running at right angles to Brook Street is South Audley Street, in which Messrs. Collins and Collins' offices are situated. The street is named after Hugh Audley, an astute attorney who foresaw the westward trend of town life, and bought as much as he could of the land "lying between Great Brook Field and Shoulder of Mutton Field," as it is described in an old map preserved in the British Museum. His success inspired a pamphlet, "The Way to be Rich—according to the practice of the great Audley, who began life with £200 in the year 1605 and died worth £400,000 this instant November, 1662." Are there similar possibilities still for far-seeing investors? There may be, but they would have to earn their profits nowadays and not merely sit tight, as Audley appears to have done, and rake in the "uneared increment."

ARBITER.

CORRESPONDENCE

THACKERAY AND THE PEACE BANQUET OF MUNSTER.

[TO THE EDITOR OF "COUNTRY LIFE,"]

SIR,—It was a happy suggestion that prompted you to illustrate in last week's issue that most interesting picture "The Peace of Münster," by Terborch. And thinking that it may be considered as equally opportune I send the accompanying photograph of "The Banquet of the Amsterdam Shooters," held in celebration of the same Peace. This may well be counted the greatest work of Bartholomew van der Helst, and when last I saw the picture it was in the Old Rembrandt Room in the Rijks Museum at Amsterdam. It is a splendid great canvas, magnificent alike in technique and colour, and I do not think one could do better than give in connection with it the following brilliant piece of descriptive writing by Thackeray: "It is not painted by so great a man as Rembrandt; but there it is—to see it is an event of your life. Having beheld it, you have lived in the year 1648, and celebrated the Treaty of Münster. You have shaken the hands of the Dutch guardsmen, eaten from their platters, drunk their Rhenish, heard their jokes as they wagged their jolly beards. . . . The hands of the figures are as wonderful as their faces. None of your slim Van Dyck elegancies, which have done duty at the cuffs of so many doublets; but each man with a hand for himself, as with a face for himself. I blushed for the coarseness of one of the chiefs in this great company, that fellow behind 'William the Drummer,' splendidly attired, sitting full in the face of the public; and holding a pork bone in his hand. Suppose the *Saturday Review* critic were to come suddenly on this picture? Ah! what a shock it would give that noble nature! Why is that knuckle of pork not painted out? At any rate, why is not a little fringe of lace painted round it? or a cut pink paper? or couldn't a smelling-bottle be painted in instead, with a crest and a gold top, or a cambric pocket-handkerchief, in lieu of the horrid pig, with a pink coronet in the corner? Or suppose you cover the man's hand (which is very coarse and strong),

from carved work, it is safer to use a spirituous preparation. I have used several with success, but mostly "Pintoff" or "Horrell's Solvent." These do not raise the grain at all. The objection to them is their high cost, but in valuable carved work it is worth it. If the wet method with soda or potash is adopted and the grain unduly raised, it will be found that by applying thin, hot size with a brush till it forms like soap, the grain fills and closes. The surplus is easily wiped off with a cloth dampened with hot water. This does not affect the colour or appearance, as it all disappears in the wood, and, moreover, forms an excellent foundation for subsequent wax polishing. It is well to be sure what your wax polish is made of or you may find you are applying something largely composed of soap. The treatment of old oak is a labour of love, and one is always learning something new by experience. A small book might be written on the subject.—QUERCUS.

AN EXTRAORDINARY APPLE BLOSSOM.

[TO THE EDITOR OF "COUNTRY LIFE,"]

SIR,—I send a freak apple blossom from the orchard of Mrs. Dutton, Moston Mills, Sandbach. The bloom was first noticed on June 16th. It was growing directly from the trunk (6ins. diameter) of a Lord Suffield apple tree, quite away from the branches. The tree is badly eaten by caterpillars and has had very little bloom. When at its best the bloom had the appearance of a camellia.—WM. A. DUTTON.

[We have only two or three times before seen so extraordinary a flower of the apple, and this is almost, if not quite, unique in being borne singly from a bud. It has neither carpels nor stamens, and some of the petals have a green edge, as though the bud set out to be a leaf-bud and then, as it were, changed its mind and started to become a group of flowers, but, checked midway, became a sort of compromise between the two.—ED.]



BANQUET AFTER THE PEACE OF MÜNSTER, BY VAN DER HELST.

and give him the decency of a kid glove? But a piece of pork in a naked hand? O nerves and eau de Cologne; hide it, hide it! Yet in spite of this lamentable coarseness, my noble sergeant, give me thy hand as nature made it!"—K. J.

REMOVING PAINT FROM OAK.

[TO THE EDITOR OF "COUNTRY LIFE,"]

SIR,—I am glad to see the letter of Mr. Kerner Greenwood about removing paint from old oak work. The use of vinegar, so often omitted, is most essential after the application of the soda. Without the vinegar the wood is left an unsightly grey colour from the action of the alkali, which, however, is neutralised by the acid and the natural colour restored. I also use pieces of wood to scrape out the softened paint from mouldings and carvings. But even then there is a good deal left in the grain. This can be largely removed while still wet with a very stiff bass scrubbing brush. What this does not eradicate yields to a further brushing out with an engineer's steel wire brush, as used for polishing metal. These are of a curved shape, much like the brushes used for polishing silver. They are narrow and adapt themselves to the hollows of moulding and carvings, and being of very fine wire bristles, do not injure the grain of the wood. For the flat panels and framing, wire "card cloth" is very useful and obtainable at most ironmongers. Should there still be left specks and hair-lines of paint in the grain, it is best not to attempt to pick them out, but to use artists' oil paint (brown), and a very fine paint brush and just touch them over. This sounds a lengthy operation, but it can be done very rapidly. If the grain of the wood has been raised too much by the soaking of the soda water, when quite dry it can be rubbed down with a thin piece of soft wood. I use a piece of soft mahogany, about 1½ ins. wide by ½ in. thick, and, say, 10 ins. long, rounded off at the end. Mr. Kerner Greenwood is lucky in not having had his oak spoilt by the average decorator. The acid would probably have been omitted, and to produce a "desirable" colour, a stain would probably have been applied, and lastly, it would have been oiled. There is a vast amount of priceless oak panelling that has been ruined. The first and last thing to remember about old oak is, never under any circumstances let it be touched with oil. In regard to removing paint

A PHEASANT'S NEST NEAR THE SHORE.

[TO THE EDITOR OF "COUNTRY LIFE,"]

SIR,—I think the following unusual discovery I made a few weeks ago might perhaps be of interest to some of your readers. While climbing about on the lower slopes of the cliffs about a mile and a half from Whitby, Yorks, I found a pheasant's nest in a clump of grass about a dozen feet above the shore and not 50 yds. from the high-water mark. The nest contained eight eggs, and had evidently been deserted some time, as the eggs were faded and discoloured. It seemed to me a strange place for a pheasant to build, anyhow, but more especially so as the cliffs above where the nest was, far from being a gradual slope, are very steep and quite unclimbable owing to their dangerously loose surface. I do not know whether this is a unique case, but it seemed sufficiently unusual to justify my writing about it.—W. LAWRENCE REID.

A PARROT'S ESTRANGED AFFECTIONS.

[TO THE EDITOR OF "COUNTRY LIFE,"]

SIR,—I wonder whether jealousy is at the root of your correspondent's parrot's behaviour. Years ago my mother had a green Brazilian parrot which was devoted to her, called her "Mother" in a raucous voice, and would follow her upstairs and downstairs about the house. One day the parrot followed to where my mother was giving orders to the footman, and she being too occupied to take any notice of the bird's imperious call of "Mother," climbed with claws and beak up her gown on to her shoulder and bit her savagely on the cheek. And on more than one occasion, if she was too occupied to take notice of his call or was talking to someone else, he would try to bite her. When she was alone talking to him he would be quite gentle. The rest of the family the parrot did not care for and would try to bite upon occasion, for which misdemeanour we used to water him with the rose of a watering pot, which he intensely disliked. However, this mode of punishment kept the parrot within bounds, though not actually curing his biting propensities.—LUCY BALDWIN.

HOW TO DEAL WITH FIR ROOTS.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—I have read many interesting articles in *COUNTRY LIFE* on various subjects, and can you or any of your readers kindly give me advice from a commercial point of view as to what is the best thing to do with about ten acres of fir roots. The plantation was cut two years ago for pit props, and was of about twenty-five years' growth. It is situated in the midst of the farm, and I would like to get it back into arable land, which it was before planted with firs, if not too expensive to do so. The land is heavy. Advice on this subject will be very much appreciated, if you or any of your readers can enlighten me.—L. J. PARSONS.

[As the land is intended for farm crops, every root must be removed. The cheapest and most efficient method of so doing is to cut through the main anchor roots with a pickaxe, and drag the stumps from the ground by means of a couple of horses. Cross ploughing will then leave the soil in a clean condition for cropping. Another method for extracting roots of moderate



WILD DUCK IN INDIAN FILE.

dimensions and which might answer in this case, where the trees were only of twenty-five years' growth, is by means of a lever and catch acting on a ratchet wheel. This is suspended from three stout poles that are placed over the roots, and by means of the lever one man is capable of exerting a lifting power of several tons. Extracting the roots by horse labour on a farm is, however, to be recommended, and the operation, though expensive, is most efficient. Explosives cannot profitably be used with such small stumps.—ED.]

A CARVED COTTAGE MANTELPiece AT ELHAM.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—Many of the old cottages in Kentish villages contain queer carved mantelpieces, and I think the original of the enclosed photograph, at Elham,



THE WHALE CASTING UP JONAH.

which bears the date 1614, is one of the quaintest. The house it is in was, apparently, a large one originally, but was long ago turned into several cottages, so that the carved mantelpiece is out of all proportion to the little room it is in. The main subject is the whale casting up Jonah, and, old as the workmanship is, the expressions on the head and face are very well preserved. Jonah appears none the worse for his submarine voyage, and is depicted skipping jauntily forth. The outsides of the cottages are also adorned with many carved figures supporting the beams of the different floors. The face of the cottages is now plaster and paint, I believe, but underneath this there is probably old brick and timber work. As these cottages stand in the open market place, it seems a pity the old original design cannot be better preserved.—M. G. T.

DACE IN A LILY POND.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—There are two well known ways by which dace, pike and other small freshwater fish obtain an entrance into unstocked but healthy, isolated, small waters. The commonest way I have met with is as eggs on the plants, with which ponds like lily ponds are stocked or restocked occasionally. More rarely they are introduced by wild duck carriage during March or April, when these birds visit such isolated waters in the night hours to feed. Wild ducks never feed on the ground where they have rested during the day, and so carry species of plants, fish as eggs, and molluscs, both bivalves and univalves, from water to water. Water-hens and other species carry plants and molluscs to a less degree.—E. ADRIAN WOODRUFFE-PEACOCK.

HOYLAKE PILOTS.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—The enclosed snapshot of a curious procession of wild duck, observed on a large marshy tract of water constituting the feeding ground of many wildfowl, may interest readers of Mr. Marples' fascinating article, "Hoylake Pilots," in *COUNTRY LIFE* of June 21st. When I first observed the phenomenon it looked like a mysteriously moving black rope, but a strong prism-glass resolved it into a long string of wild ducks following closely in each other's wake in Indian file. The whole flight took wing before I could get near enough to obtain a photograph, but, on a subsequent occasion, I managed to crawl up behind some thick bushes and reeds, and so approached near enough to obtain the above snapshot with the long-focus single combination of the lens, before the ducks discovered my presence and made off. Examination of the spot showed that they had made a distinct channel through the water weeds, and this was evidently the explanation of their curious behaviour, for, by utilising the track made by the leader, the remainder had been intelligently saving themselves the trouble of pushing their own way through the weeds to reach the clearer stretch

of water beyond.—ERNEST E. PARK.

A PERSEVERING BLUE TIT.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—A short time ago I had rather an interesting experience with a blue tit. It was towards the end of the mating season and the birds were thinking about building their nests. One day I went into my room and noticed that the looking-glass was dirty and the dressing-table covered with crumbs. At first I did not think much of it, but, as this strange thing happened every day, my curiosity was aroused. A few days later I opened the door quietly, and saw a blue tit fluttering up and down the looking-glass. When it noticed me it flew to the top of the open window. As it seemed to know its way out so well, I conjectured that the little bird must have been in several times before and was the cause of all the trouble. Then, at last, it dawned on me what had happened. The blue tit's mate must have been killed or disappeared without its knowledge. On its searches the bird had flown into my room and seen its reflection in the mirror. Supposing this to be its mate it had brought food, as its reflection would not follow it. After a time the poor bird gave up the attempt.—A. C. NISBET.

TWO CUCKOOS IN HEDGE-SPARROW'S NEST.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—On June 7th I found a hedge-sparrow's nest, well concealed in a clump of hawthorn and briar, at the side of a lane in Leicester. I revisited the spot on the 9th and found that the nest contained one egg. On the morning of the 11th I again happened to pass the nest, and on looking into it found three eggs there. Returning about 5 o'clock in the afternoon I noticed the shell of one of the eggs lying broken on the side of the lane, and fearing that some country boy had discovered the nest and wantonly destroyed the eggs, I approached the bush and surprised the hedge-sparrow on the nest. It was a moment or two before she fluttered away, when, to my amazement, I found the nest contained one of her own eggs and two cuckoo's eggs.

I had frequently seen cuckoos in the neighbourhood and had been expecting to find one of their eggs. The two cuckoo eggs, though similar in shape and size, varied considerably in colour. I should be glad to know if any readers of *COUNTRY LIFE* have met with this experience, and whether they suggest that the eggs were laid by the same or two separate birds. It would appear that the cuckoo, fearing overcrowding in the nest when the full clutch of eggs were laid, removed two of the original occupants, and as no trace of the inside of the egg could be found where the shell lay, it would suggest that the egg had been broken and the inside devoured by the cuckoo after removal from the nest. It seems remarkable that two eggs should have been deposited in one nest, when within a radius of about 60 yds. I myself knew of four whitethroats' and one yellowhammer's nests with the clutches of eggs incomplete.—SIDNEY ASH.

DOMESTIC HOT-WATER SUPPLY & HEATING.—II

IN the first article (COUNTRY LIFE, June 7th, 1919) a brief survey was given of the different methods of domestic hot-water supply and heating by means of coal or coke-fired boilers. In the present article gas as the heating agent will be considered, principally in connection with hot-water supply, for the features of gas fires or gas-heated radiators are already familiar.

One of the outstanding merits of gas is, of course, its convenience. With coal or coke as fuel there is necessarily the trouble of starting the fire, and a certain amount of attention is needed in keeping it going, whereas gas is always ready for use at any time of the day or night; a match is all that is needed to light it; the maximum heat value is obtained at once; and as soon as heat is no longer required, the consumption of gas can be cut off. The best known form of gas heater for hot-water supply is the geyser, which has long since established its position. Early forms of geyser were defective; they consumed an excessive quantity of gas, and were not designed to get the utmost value out of the heat produced; but in the modern geyser—such as the "Lightning," the "Plym," the "Perfecter"—these defects have been overcome, and the merits of the apparatus for supplying hot water to a bath or for washing-up purposes have made the geyser a popular feature of house equipment. In recent years, however, special attention has been given to the gas-heated hot-water boiler or circulator, and this type has been developed to a point of great efficiency, its use in conjunction with gas cookers having, in many cases, resulted in the disappearance entirely of the ordinary kitchen range.

Some of these gas-heated boilers are simple cylinders holding so many gallons of water as storage for use as required, but others form part of a regular circulating system, so that not only is there always ready to hand a good supply of hot water for washing-up or bath purposes, but also the house can be heated through pipes and radiators as with a coal or coke-fired boiler. Several types also are designed for use in connection with a kitchen range boiler, either as a separate supply or as a supplementary heater; so that if, for instance, the kitchen fire is out or has dropped low, the gas-heated boiler will still maintain the hot-water supply; while when the kitchen fire is well made up for cooking or ironing purposes, the heat from it is utilised through its own boiler, and the gas boiler is cut out of the system.

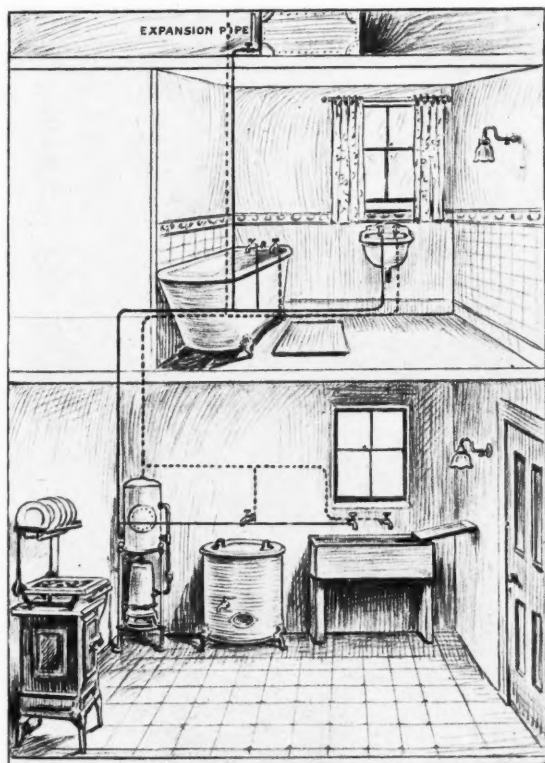
Gas-heated boilers are of many patterns. When intended to provide always ready to hand a supply of hot water in comparatively small quantities, such as are required for washing-up purposes throughout the day, the boiler is fitted over the sink, and generally has a thermostat which automatically turns down the gas to no more than a by-pass flame when the desired temperature has been reached, turning it up again when hot water is drawn off. In this way the gas consumption is reduced to a minimum and a constant supply of hot water is maintained. The boiler, being automatic, avoids the extravagance which often happens when the gas consumption

is controlled by servants, who have a habit of letting it burn at full pressure when all necessity for such use is at an end. The makers state that the consumption of gas in one of these boilers (the "Lyn") providing hot water for washing-up and other domestic purposes (but not including water for the bath) has worked out at about 2d. per day for a family of five persons.

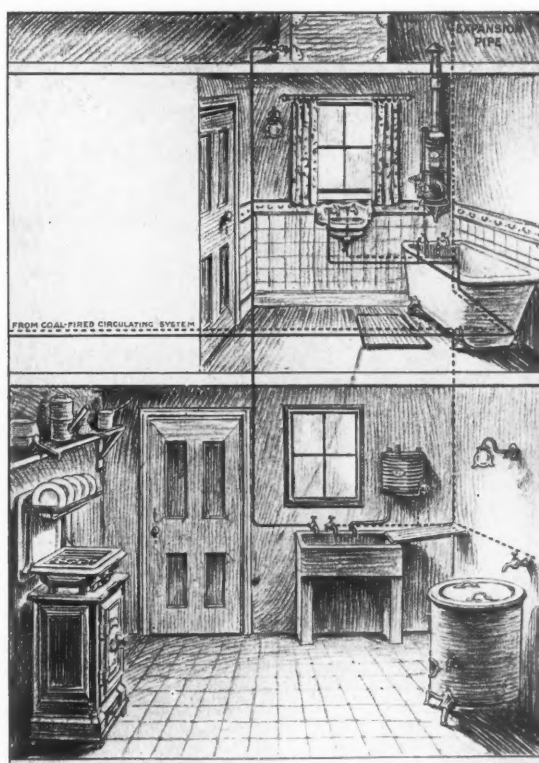
Where hot water is needed not only in the scullery for domestic purposes, but also upstairs for the bath—which is the usual requirement—one of three separate arrangements can be adopted. These are by means of (1) a geyser in the bathroom and a boiler downstairs for sink supplies, (2) an instantaneous multi-point geyser supplying bath, lavatory basin and scullery sink, and (3) a gas-heated boiler with storage cylinder on the usual circulating system. Each system has its particular advantages, and if the case for all three is stated and the figures from some tests are set down, the reader will be able to determine for himself which will best suit his own requirements and circumstances.

Case 1, with geyser in bathroom and automatically controlled boiler in scullery (see right-hand illustration below). As might be expected, this method shows the lowest running cost. The efficiency of the geyser is the highest of any form of water-heater burning gas. Only when water is actually being drawn off is gas consumed; there is no storage quantity to heat; and there is no loss in radiation from a circulating system. The result of a test made under ordinary domestic conditions in 1915, with gas at 2s. 6d. per 1,000 cub. ft., gave the weekly cost for this method as 1s. 7½d. The household consisted of three adults and two children; and an average of fourteen baths per week were taken, this household being great believers in hot baths! The geyser had an outflow of two gallons per minute, and the boiler over the sink, with a capacity of three gallons, was alight for about fourteen hours per day. The test lasted for three months—January to March—the coldest period of the year. In this case the geyser and the boiler were connected to the existing hot-water system; and though the kitchen range was never lit expressly for the purpose of providing hot water, it was used occasionally as required to air clothes and to burn rubbish. The geyser and sink boiler, therefore, on these occasions received the benefit of the warmed water. In passing, it may be noted that a spray bath can be provided in conjunction with a geyser, as shown by the illustration on the next page.

Case 2, with instantaneous multi-point geyser supplying bath, lavatory basin, and scullery sink. This method requires no attention at all. Hot water is always instantly available. The opening of any tap automatically raises the gas, and the closing of the tap at once shuts off the gas to a tiny by-pass. A test made in a different household to the one above referred to, but under similar conditions, with a multi-point geyser similarly connected to the existing hot-water system, gave the following results: Gas consumption for all hot water used



With a Gas-heated Circulator.



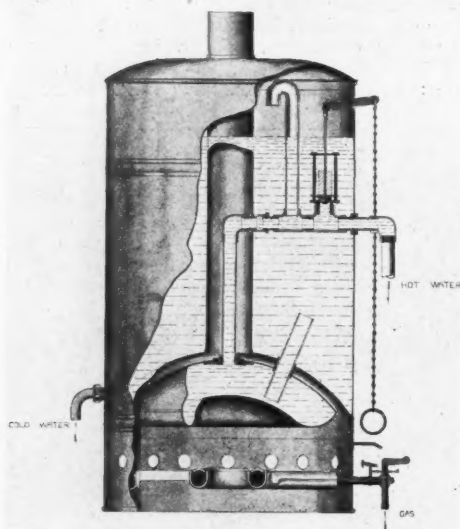
With a Sink Boiler and a Geyser.

SKETCH DIAGRAMS OF TWO SYSTEMS OF HOT-WATER SUPPLY BY GAS.

(washing-up, house cleaning, baths, etc.), 700 cub. ft., or, with gas at 2s. 6d. per 1,000ft., 1s. 9d. per week. The family was of the same size, namely, five persons, but in this case the average was only eight baths per week. The test extended from October to December, 1915.

Case 3, with a gas-heated circulator and a storage cylinder (as shown by the left-hand illustration on the preceding page). This, of course, is the gas equivalent of the coke or coal-fired independent boiler connected to a circulating system. The great difference is, however, that it can be started instantaneously, and there are none of the troubles associated with the lighting, upkeep and cleaning of a firegrate. The gas can either be lighted afresh in the morning, or, having a thermostat, kept alight all night—by a by-pass jet only—and in the latter case hot water will be ready at all times, however early or late. This system shows a somewhat higher cost of consumption than either (1) or (2), chiefly owing to loss of heat by radiation from the cylinder and pipes; but this loss can be materially reduced, and the efficiency correspondingly increased, by lagging the cylinder with insulating material. A test ranging over a complete year was made in a household of five persons with an "Ironclad" gas boiler arranged in conjunction with the circulating system, and the consumption for the year was 58,400 cub. ft., which worked out at 2s. 9d. per week with gas at 2s. 6d. as before. In this case the gas boiler, being connected to the existing hot-water system, received the benefit of warmed water when the kitchen range was lighted, but this was only occasionally, all the cooking being done by gas. Where, as might commonly happen in such circumstances, the kitchen fire was in frequent use—certainly during the winter months—the gas consumption would be considerably reduced.

One very recent appliance especially designed for small property is the "New Cottage" heater. This is a particularly ingenious arrangement. It comprises what may be described as two boilers, one within the other, a small boiler and a large boiler. The small boiler holds a gallon of water and is no other than an enclosed kettle, while round and about it is the larger boiler containing enough water for a bath. The working of this arrangement is as follows: Ordinarily, when a small quantity of water is required quickly for, say, washing-up purposes, the gas is lighted and the enclosed kettle will supply a gallon of hot water, at 170deg. Fahr., in about eight minutes (in five minutes after the first lot of water has been drawn off), the gas consumption being about 8ft. in the first instance and 5ft. afterwards. When water for a bath is desired, all that has to be done is to open a valve, when the large boiler is thrown into the system and a hot bath of 20 gallons is ready in thirty minutes with a gas consumption of about 30ft.; that is to

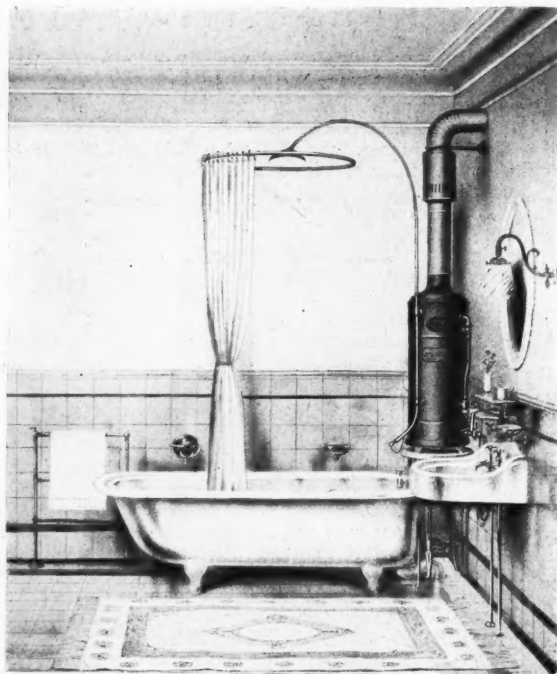


THE "NEW COTTAGE" HEATER.

say, with gas at 5s. a thousand feet, the cost of getting enough water for washing-up is one-third of a penny, while a hot bath costs 2d. (This when starting from quite cold water; if the water is partially heated, as it is when the boiler is connected with the kitchen range or when the "enclosed kettle" has already been in use,

the time taken in getting a bathful of hot water may be not more than a quarter of an hour, and the gas consumption correspondingly less.) The apparatus can also be adapted to burn oil instead of gas.

For the washing of clothes gas-heated coppers are in very wide use, especially in the North of England. They save labour and avoid dirt, are low in initial cost, cheap to instal, and economical in maintenance. In connection with them a water-supply tap fitted over the boiler is a convenience much appreciated, as it does away with the trouble of filling with a bucket from the scullery tap, and avoids spilling and splashing of water. This may necessitate a removable lid instead of a hinged one, and, if so, it should be flat, so that when the boiler is not in use the lid can be reversed to serve as a table-top. With a gas-heated portable copper of the usual size (10-gallon capacity) the consumption may be reckoned at about 30 cub. ft. per hour; or, say, 1½d. per hour with gas at 3s. 9d. per thousand.



"SPRAY" GEYSER FITTED IN A BATHROOM

The age to come is undoubtedly the Electric Age. Electric cooking and heating will usher in the domestic millennium, when most of the labour in the house will have been got rid of. Meanwhile, gas cooking and heating are with us, and their merits have long since been appreciated. The "all-gas kitchen" is a common phrase. Gas certainly is being more and more used both for cooking and heating, and the gas-heated boiler enjoys a wide popularity.

UBIQUE.

THE NEW SCALE OF ARCHITECTS' CHARGES

THOUGH, in the absence of registration, the new Scale of Professional Charges just issued by the Royal Institute of British Architects could not be enforced in law in the same way as charges by lawyers, doctors and dentists, who all have a legal status, the Scale could be substantiated on the ground of accepted custom, and it is of public interest, therefore, to set down here the main points. First and foremost is the general charge for designing and supervising the erection of a building, which is now 6 per cent., instead of 5 per cent., on the cost of the work as executed, provided the contract exceeds £2,000; if below that sum, then the charge is to be graduated from 10 per cent. (in the case of work costing £100) to 6 per cent. For alterations and additions to existing buildings the charges may be higher, but are not to be more than double the percentages above mentioned. For designs for fittings, decorations, furniture and other similar features, special fees are charged, varying according to circumstances. If the project is abandoned, one-fourth of the percentages named are chargeable for preparing sketch design and estimate of cost, and two-thirds of the percentages when, in addition, drawings have been made and particulars prepared sufficient to enable quantities to be taken out or a tender obtained. A special clause, however, covers estate development and housing schemes. For these the charge is 5 per cent. on the first twelve houses, 2½ per cent. on the next sixty, and 1½ per cent. on any remainder, with a charge of 3 per cent. on work which is not proceeded with after the drawings and specifications have been prepared. For taking out the quantities for a building the charge is 2½ per cent. on the estimated cost up to £5,000 and 2 per cent. beyond that; an increased percentage being chargeable for very small or elaborate works and for alterations; but again in respect of housing schemes there is a lower rate, the charge being 2 per cent. on the cost of the first twelve houses, 1 per cent. on the next sixty, and ½ per cent. on the remainder. For pricing quantities or for preparing approximate estimates the charge is ½ per cent. Charges for land survey are 2 guineas per acre for the first 25 acres, 1 guinea on the next 275 acres, and 5s. per acre on the remainder, the minimum charge being 25 guineas. Particular attention should be directed to the clause stipulating that "all drawings, specifications, and documents prepared by the architect shall remain his property, the copyright in the same being reserved to him." This clause has never before appeared in the Scale. It is now inserted to make unequivocal from the commencement a point about which there has been misunderstanding and, in some cases, costly litigation. The architect's claim is that the drawings are the tools of his craft, and in common justice he should retain possession of them. When the house is built the client has got what he asked the architect to provide, and though it is ordinary custom for a client to be supplied with a set of tracings for his own private reference, the architect maintains his right to the originals and the copyright in them. In test cases carried to the House of Lords this right has been disputed, the legal mind persisting in a lack of appreciation of what really constitutes an architect's service. It is much too big a subject to be more than touched upon here, but the clause in the new Scale is perfectly clear and definite, and there should be no occasion for any client thinking he is entitled to the architect's drawings.

R. R. P.

WASP DWELLINGS

SOME INTERESTING TYPES.

EVERY summer there is a renewal of interest—perhaps we should say, concern—in the doings of wasps. Fruit trees in such and such a district are being despoiled in appalling numbers, or it may be that paragraphs appearing in various newspapers call attention to the capture of several hundred queen wasps by some person who has had the wisdom to perceive in them a real source of danger. Too often, however, the so-called “queens” are not queens at all, and the well-meant efforts so much waste of time.

The best season to catch the queens is early in spring when, after a period of hibernation lasting through the winter, they are selecting sites in which to establish new colonies.

Each queen killed will represent a reduction in the summer of perhaps 10,000 wasps.

The same object is, of course, attained by destroying the nests themselves, and with them the queens, who would otherwise in all probability survive the winter to propagate anew. But nests have to be diligently sought for, whereas queens on the wing are frequently encountered and quickly despatched.

A favourite way of destroying the occupants of an underground nest is to drench it with a solution of cyanide of potassium. Curiosity then often leads to the nest being dug up, pulled to pieces, and possibly exhibited to friends. In this way wasps' nests have become familiar objects, and there can be few country folk to whom they are unknown—that is to say, in the complete state. At an early stage of formation, however, their identity is not so apparent.

One of these embryo nests is shown at the foot of our illustration, and above it a full-sized specimen. The tree-wasp suspends its habitation from the branch of a tree by a slender stalk, and so closely does it resemble in structure the nest of the common wasp, to be described shortly, that no further reference need be made to it here.

Wasps do not stand so high in the popular estimation as do bees. The honey-bee, that paragon of ordered industry, has always been considered the friend of mankind, eulogised for the untiring energy with

which it makes provision for its species, at the same time unconsciously bestowing benefits upon man by fertilising his flowers and fruit and contributing to his larder. But we must not suppose that wasps have not their rôle to play in the scheme of nature.

They are not wholly bad. At the same time our prejudice is not without foundation. Anything of a saccharine nature is to them irresistible, consequently they do not enlist the tenderest sympathies of the housewife, the shopkeeper or the gardener, and their intrusiveness at the family table has dissipated what little respect they may be entitled to. But turn a blind eye to these faults, and you will find the wasp as engrossing as any other insect.

There are both solitary and social wasps, just as there are solitary and social bees. Of the solitary kinds, which are but seldom noticed by the casual observer and do not build combs, some eight hundred are foreign and but sixteen British. They are usually referred to as mud-wasps, because the nest is a tiny chamber made of that substance.

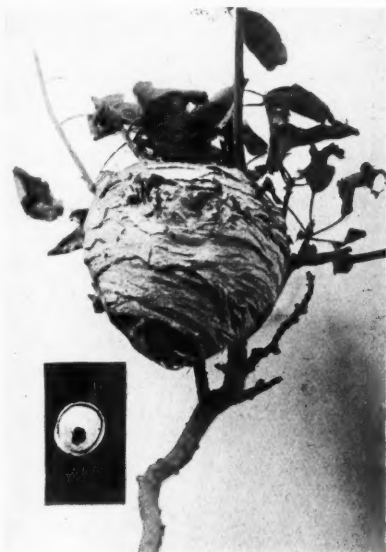
The social wasps number about six hundred species, not more than seven of which inhabit this country. Our best known example, the common wasp (*Vespa vulgaris*), usually builds in a cavity underground, though not infrequently it prefers the rafters of an outhouse. The two photographs

give a good idea of the appearance, both within and without, of a typical nest. The combs, it will be observed, are enveloped by a covering of what appear to be leaves of a flimsy, papery substance, there being more layers in some places than in others. It is really a kind of papier maché, worked up by the wasps' jaws from fragments of vegetable tissue, particularly woody fibre, amalgamated by means of a natural cement. While in the condition of a thick paste it is spread in layers to form the above mentioned leaves. In the upper photograph these successive layers are seen as concentric lines, like the strokes of a painter's brush upon canvas.

The lower photograph of a section through the same nest gives a good idea of the parallel arrangement of the combs. There are usually from ten to fifteen of them, decreasing in size towards the top and bottom of the nest, the

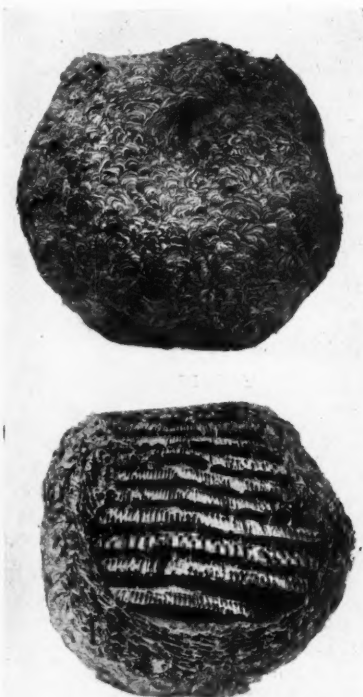


Hornet's nest hanging from a rafter.

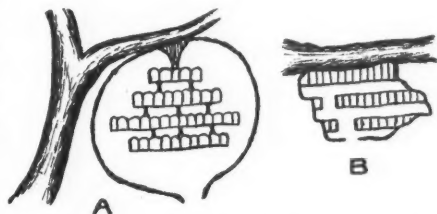


Nest of tree-wasp (*Vespa norvegica*) and early stage of same.

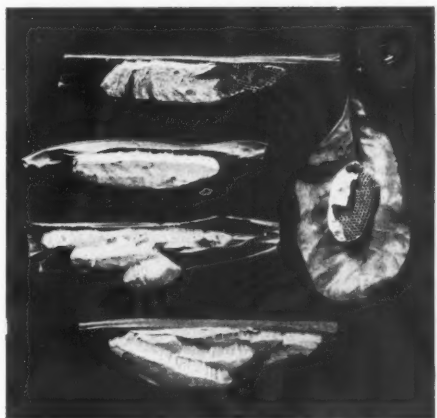
of potassium. Curiosity then often leads to the nest being dug up, pulled to pieces, and possibly exhibited to friends. In this way wasps' nests have become familiar objects, and there can be few country folk to whom they are unknown—that is to say, in the complete state. At an early stage of formation, however, their identity is not so apparent.



Nest of common wasp (*Vespa vulgaris*) and section of same.



Types of nest built by social wasps. A. Tree-wasp; B. *Polybia*.



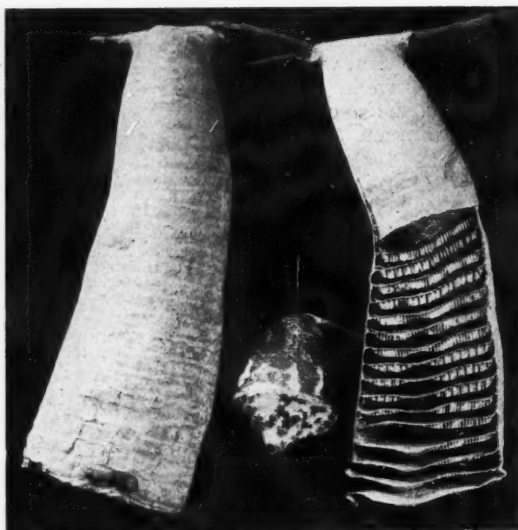
Nests of South American wasps (*Polybia*).

uppermost being the first constructed. In a populous nest there may be at least 16,000 cells, made of the same paper-like material as the outer covering of the nest; not of wax like those of the honey-bee—an important difference.

In drawing a distinction between the architecture of the wasp and the bee two other important points should be noted, namely, that the wasp places its combs horizontally and the bee vertically, and that the cells of the former are one row deep instead of being placed, as the bees prefer, in a double row back to back.

The giant among our native wasps, the hornet, builds a nest much like that of the common wasp, but it has several entrances, is made of a coarser "paper," and the cells are much larger. Hollow trees are the favourite habitat, but the hornet will sometimes avail itself of the protection of a thatched roof. Nests built in hollows are generally without a covering.

Two styles of building can be recognised in the covered nests constructed by social wasps, as represented in the accompanying sketch. The first is the globular type made by the tree-wasp, suspended from a stalk and having an opening below. The second type is more ingenious. A number of cells are spread in a layer over a leaf. When completed, this first layer is closed in with a thin papery cover that is pierced by a single opening, but that does not actually rest upon the cells. Another row of cells is then built on the outside of this cover, and protected by a similar



Nests of card-making wasp (*Chartergus*.)

cover also pierced by a hole giving access to the comb, and so on.

Several beautiful examples of the latter class of nest are here figured. All are the work of wasps of the genus *Polybia*, inhabiting South America. The top specimen and that affixed to a broad leaf show the first layer of cells partially enclosed. The second shows it completely enclosed, and above the nest may be discerned several tiny pillars by which it is suspended from the leaf. In the two lower specimens the method of superimposing additional layers of comb is well illustrated.

Such a type of nest lends itself to almost unlimited expansion, given, of course, a good foundation. The possibilities of elaboration are seen to perfection in the wonderful nests of the card-making wasp (*Chartergus*) of South America. These are bell-shaped structures made of a whitish or chequered material exactly resembling cardboard, hanging from the branch of a tree in such a way that the branch passes loosely through the upper end of the nest and allows it to swing in the wind. The interior contains layer after layer of comb, attached to the sides of the nest, and without intervening pillars. The only entrance is a tiny hole at the base, just large enough to admit comfortably one wasp at a time, and each comb has a hole through it to provide access to the uppermost. The specimens here illustrated were remarkably fine examples, measuring upwards of 24 ins. and containing over twenty-seven storeys.

DONALD PAYLER.

TURF, STUD AND STABLE

PAVING THE WAY FOR THE PARI-MUTUEL.

A CORRESPONDENT, who signs himself "Never Lay Odds," sends me a long letter from which I make the following extracts: "Reading your contribution to COUNTRY LIFE about Ascot I was surprised that you did not say 'I told you so!' For as far back as last year you mentioned Irish Elegance as the probable winner of the Hunt Cup. Indeed, when writing in red pencil, as is my custom in January, the dates of the principal events, I added the name of Irish Elegance after the words 'Hunt Cup.' There I found it on the day of the race, and I need hardly tell you what my bet was.

"You speak of great losses on beaten favourites at Ascot. Well, to tell the truth, a few of those favourites were false favourites. Cinna had had sore shins, and many of Donoghue's mounts were made favourites by the bookmakers, who anticipated the public's fancies. My opinion is that it ought to have been a very good Ascot for backers if they had acted on my principle: never to back a fancy at less than 2 to 1 against. I had not been racing since 1914, if I except the Chantilly private meeting in 1918. Accordingly, when at Ascot I made a list of likely horses according to their form. This list I submitted to a few friends who were good judges, and when they approved I doubled my stake in those instances.

"On the first day I had two bets. They were Ciceronetta (on looks and reports), won 3 to 1; Warwick (form and looks), lost. On the second day I backed Fiddle-de-Dee, lost; Irish Elegance, won 7 to 1, and Grand Fleet, lost; Old Bill, won 5 to 1, and Racket won, 4 to 1. On the third day I had only one bet—By Jingo!, who won the Cup at 3 to 1; and on the concluding day I backed Bright Folly (on reports and looks), won at 5 to 1; and Scatwell, who won at 4 to 1. I fancied Diadem (won), Iron Hand (lost), Cinna (lost), Milton (won), and Lacrosse (lost), but did not back them as the prices were well under my limit."

My correspondent was lucky, and his luck is a case of having little knowledge, with far better results than came to the professional backers who know every move in the market. They had a bad meeting. I confess that when, last year, I wrote of Irish Elegance for the Hunt Cup of 1919 I had no idea he would have to carry 9st. 11lb., inclusive of a 10lb. penalty. I might, in that case, have shied at prophecy for which I get the

credit now. His system of never backing a horse at less than 2 to 1 against is interesting, and it evidently paid him at Ascot because he was judicious and fortunate with his selections. No professional backer could afford to look on and never bet at less than 2 to 1. He relies on winning in the long run by gambling on what he considers "good things" at even money, 5 to 4, 6 to 4, and 7 to 4 against. Those are the favourites which appeal to him if, at the same time, he considers they are entitled to be favourites. One reason why the general body of backers lost at Ascot and may now be failing to hold their own elsewhere is that the prices are so outrageously unfair. The bookmakers are a pathetic relic of the old school. They want everything their own way. They do their best, though they do not seem conscious of the fact, to discourage betting by offering pinched and unfair prices. They make the favourites at their own prices, whereas a favourite should be made by money in the market. All this is paving the way for the pari-mutuel, which is the only system of fair betting. Experiences this year have brought many converts to the system, and simply because the bookmakers will not attempt to trade fairly. They are killing their own game.

THE LOTTERY OF YEARLINGS.

The recent sales at Newmarket were amazing in the magnitude of the prices realised. Here they are boiled down to a few figures which speak eloquently of the super-boom in bloodstock: 157 horses made 119,255 guineas, an average of nearly 760 guineas. The horses in training to the number of 27 brought 26,965 guineas, which represents a trifle under 1,000 guineas each. The yearlings numbered 130, and they brought 92,290 guineas, the average in this case being close on 710 guineas. Can you doubt, after reading these figures, that the market for bloodstock of all ages is keen to a degree? and one wonders what the figures will be like at Doncaster, where the annual yearling sales will be renewed for the first time since 1914. Some of the young ones sold at Newmarket made quite sensational figures. There was the case of the Prince Palatine—Rock Garden colt—a beautiful individual—which Mr. H. Cunliffe-Owen acquired for 6,500 guineas. He was bred by that grand old man, Martin Gurry, at his stud on the outskirts of Newmarket. Why should a Prince Palatine make this fabulous sum? A Tetrarch, yes; but Prince Palatine was not considered by Mr. J. B. Joel to be a success, and so he

sold him to France for £25,000. How remarkable it is that many a sire has left his best stock behind him after having been sold out of the country! There was the notorious case of Sundridge, who also belonged to Mr. J. B. Joel and was sold to France.

Mr. Cunliffe-Owen is obviously a rich man, and, indeed, it is only necessary to say that he is the head in this country of the British-American Tobacco Trust. The longest purse will get the most costly yearlings at auction. He got Orpheus (by Orby out of Electra) for 1,900 guineas last year, and the colt is about the best two year old of the season, so one can understand that this newcomer to the Turf was encouraged to indulge still further in what I would call the yearling gamble. For it is a lottery beyond all question. Let me take ten yearlings which, in 1918, made over 3,000 guineas apiece. How have they fared in 1919? Lord Wilton gave 6,000 guineas for Head Nete, by Orby out of Mesange. She was seen out last week for the first time and left at the post! Nothing has been seen in public of Mr. A. E. Barton's grey colt by The Tetrarch out of Miss Cobalt, 4,200 guineas. Tête-à-Tête, a grey filly by The Tetrarch out of Bill and Co, made 4,000 guineas, and she has won a race in Ireland. We have heard nothing more of Lord Lonsdale's filly by Lomond out of Sisterlike since he gave 3,700 guineas for her, and Lord Wilton's filly by Roi Herode out of Sacred Ibis (3,500 guineas) has still to win any sort of a race.

Similarly the same owner has Morganatic Marriage, by Royal Realm out of Countess Zia, for which he gave 3,300 guineas. He has been second once, and there are misgivings as to his temper. Sticker, by Stedfast out of Officious, made 3,200 guineas, and he has done no good. Lord Wilton's Tetrarch—Snoot colt (3,100 guineas) has yet to win; and nothing has been seen of Rinaldo, by Bayardo out of Killising, for whom Mr. Rudd gave 3,100 guineas, and Tea Tray, by The Tetrarch out of Good and Gay, for whom 3,000 guineas was paid. Thus, of the ten mentioned, only one—Tête-à-Tête—has won, and that a race worth £92 in Ireland! Yet collectively they cost their purchasers 37,100

guineas. Am I right in describing yearling buying as a gamble? Surely the lottery element comes in when I add that Mr. Frank Curzon gave 10 guineas for Pretty Girl as a yearling at auction and sold her last week as a three year old for 2,900 guineas because of her good winning record this year! I will merely add in reference to the recent sales that the National Stud yearlings sold well, thanks chiefly to the 4,500 guineas paid for The Panther's half brother—by Spearmint out of Countess Zia. He is a handsome colt, but evidently the eccentricities of Sir Alec Black's horse did not frighten buyers, even although Spearmint also has his critics among breeders and owners. The buyer was Mr. Cunliffe-Owen, who is undoubtedly an acquisition to racing, as he is obviously keen on racing on the best lines. He has, too, an admirable trainer in Felix Leach, who is thoroughly well liked and, moreover, is very capable and hard working.

The race for the Eclipse Stakes takes place on Friday next at Sandown Park, and Major Astor's Buchan is fully expected to win. As the race was run, this charming horse was very unlucky to lose the Derby to Grand Parade, but he made no mistake about crediting his owner with the Princess of Wales's Stakes at the last Newmarket meeting. The opposition to him was very modest indeed, and Buchan was never out of a brisk canter. He is marked out now for the Eclipse Stakes and the St. Leger, but in the former, at all events, he may meet with some worthy opposition in Sir Alec Black's Cygnus, who is also by Sunstar, and has done well in his training since the ground became softer. I imagine, too, that Buchan wants soft ground, for he has very light and shelly feet. They are far from being perfect, and the greatest care has to be taken in fitting him with racing plates. By the way, I am told that The Panther may be started for the Midsummer Stakes at Newmarket next week, but I do not see what good object would be gained by running him again until it is known he is in better heart. Moreover, he would have to give some considerable weight to Paper Money, who looks the certain winner of the race.

PHILIPPOS.

A REAL FOURSOME

BY BERNARD DARWIN.

THERE is a danger of assuming a rather sentimental and affected attitude towards foursomes. We are apt to say it is the finest form of golf in the world and then insist on hitting our own ball as many times as possible during the one day in the week that is perhaps at our disposal. Yet when, as at Sunningdale last Saturday, we can watch a foursome—not a fortuitous amalgamation of four persons after a heavy lunch, but a real, hard-going match between four fine golfers—we must surely acknowledge that it is a noble game.

Why golf clubs that pay professionals to entertain them so regularly insist on their playing four-ball matches it is hard to understand. Dr. Johnson's plea of "pure ignorance" is the only one that can be advanced. When professionals play a four-ball match it is rare to find a spectator who knows which side is up and which down; the prevailing atmosphere is best described by the refrain of that popular song "Where did that one go?" It was a very different matter at Sunningdale, where Braid and Jack White played Taylor and Vardon a thirty-six hole foursome. Everyone knew how the match stood, and had time and opportunity to watch every stroke that was played.

It was a great pity that a match which would normally be a very close one turned out on this occasion one-sided. Taylor and Vardon were beaten by 9 up and 8 to play, and never, as far as I know, have this redoubtable couple been so treated before. There was a famous golfer, now, alas! dead, who battered his putter against the wall at Prestwick and said to it, "Don't you presume on my good nature any longer." We have all felt at times a desire to do this to our own putters, and still more should we like to do it to Harry Vardon's. It is really like going to see a man hanged to watch this greatest of all golfers when he is within a few feet of the hole. To such an extent does he cut the ball with that wooden putter of his that once he came near to taking a small divot out of a green, and the spectacle is harder to bear because of the patience and good temper and perpetual painstaking with which Vardon endures his misfortune. He would not be human, however, if it did not sometimes affect the rest of his golf, and so at Sunningdale the whole of his game was—for him—loose and disappointing.

Taylor did his best; he never lost heart, and his every shot was crisp and firm as ever. Especially was his wooden club play magnificent, and his reputation with the mashie sometimes blinds us to his excellence as a driver. But he could not perform the impossible, and Braid and White played so well that there was little chance of recovery. When they won the match their score was but three strokes over an average of fours for twenty-eight holes. Anybody who knows Sunningdale

with tees far back and the ground wet and slow will realise by how very little they fell below perfection.

The winners made a wonderfully interesting combination for any student of foursome play. Each made an almost ideal complement to the other. Those who are conspicuously good putters are nearly always conspicuously successful in foursome play, even though they only get half their normal amount of putting to do. Jack White holed no really long putts on Saturday, but he was unlucky not to do so, for his ball was constantly lipping the hole. Braid was putting well, but White must have saved him a great deal of trouble and mental anxiety by leaving him very little holing out to do. What holing out he had to do himself White did excellently, and his short pitching was likewise beautiful. Having done his full duty in the department in which he is pre-eminent, he wisely let Braid do the hard work in the long game. He is himself, of course, a good driver, but not a great one. His method is rather laboured and complex, and that slight falling forward of the body, in striking contrast to the rock-like stillness of Taylor, does not inspire complete confidence. Recognising his own comparative weakness, White played admirably within himself in the long game; never pressed when Taylor outdrove him, but kept his ball on the course and left the rest to Braid.

And Braid rose nobly to the occasion. His whole long game, and especially some of his long iron shots, were worthy of him at his best; nothing could have been finer. After his many lapses at St. Andrews it was delightful to see him putting well once more. He was using, as he almost always does, his aluminium putter, but once at the first hole, where he wanted to play a difficult putt across a slope with something of a hook, he used a goose-necked iron club. Moreover, he holed the ball and, if it be not fanciful to say so, thereby laid the foundations of his victory by filling his partner with confidence. I retain a particularly vivid impression of one drive, a colossal tee shot to the ninth hole in the afternoon. Vardon, who had the honour, hit a very good shot, and his ball stopped some twenty-five yards short of the flag. Then Braid really let fly. His coat seemed to be whirled into strange new creases, his knees crumpled under him, and the ball finished almost over the green, a dozen yards past the flag. It was a stroke positively terrific in its vehemence, and it was interesting, moreover, in that Braid very skilfully used the wind, which was blowing from left to right. He abandoned his normal stroke, which is played with a little hook, and played a shot which drifted slightly from the left. Anyone who saw that stroke and many others that were played on Saturday will think twice before declaring that the triumvirate's day is done. There is much life in these old dogs of forty-eight yet.

THE LONDON OF 1819

A CENTURY OLD MAP.

JUST a hundred years ago, on June 4th, 1819, Mr. W. Faden, Geographer to His Majesty and the Prince Regent, published what he described as "a new topographical map of the country in the vicinity of London, describing all the new improvements." As the map was on the generous scale of zins. to the mile, it is easy to compare the London which we know to-day with the London of Charles Lamb and of Keats. That was the London of the period before the advent of the railways, the London when the City merchant either walked or rode on horseback to the City, or if he lived far out—as distances were reckoned then—took the coach. The centre of London, except for the few big street improvements of later years, was much the same as it is now. The striking points of difference lie on the boundaries and in the suburbs.

Practically speaking, the northern boundary was the line of the Marylebone Road—then known as the New Road—Euston Road, Pentonville Road and City Road. The builders had scarcely crossed the Edgware Road. Paddington was still a village where Mrs. Siddons looked for and found a country cottage. Tom Moore, a few years before, had written of the cemetery by Paddington Church as one of the sweetest rural places where one could lay a beloved child to rest. Lisson Grove was just a building. Mr. Lord had only recently been evicted from Dorset Square and transferred his cricket ground to its present site; Somers Town, now one of the most deplorable districts in all London, was "a new improvement"; the new St. Pancras Church was not yet completed, and the old one, now dismally hidden away at the back of the Midland Station, still stood in open country, and Shelley and Mary Godwin used to stroll thither by footpath when Mary visited her mother's grave. The ugliness of Pentonville was rising, but there were still open fields to the south around the pleasure gardens of Bagnigey Wells and the New River Head. The extreme northern boundary of London in 1819 was, in fact, the Regent's Canal, which had fields on both sides all the way from Paddington to its outlet into the Thames near Limehouse. Shoreditch, Hoxton, Bethnal Green and Stepney were still, so to speak, in the country. The town was spreading fast, and rural amenities were disappearing, but beyond the canal lay footpaths and pleasant lanes.

Suppose that you were taking a walk to Hampstead. Then, as now, the main Hampstead Road ran from the top of Tottenham Court Road past Tottenham Court and the Britannia and up Haverstock Hill. But from anywhere west of Tottenham Court Road it was a footpath walk through the fields. Finchley Road had no existence. A footpath led past the Artillery Barracks—in what is now St. John's Wood—to a point where Swiss Cottage now stands. There it forked right and left. The left branch is now the Finchley Road to West End; the right is now the steep ascent of Fitzjohn's Avenue, and it continued on to Frognal, just below Hampstead Church. Keats and Haydon, the painter, knew these paths well. They used to loiter in them on summer evenings to hear the nightingales singing in the fields round West End Lane, which still winds its leisurely and twisting way down the hill to Kilburn Wells, though the wells themselves have long since vanished. From Kilburn to Paddington through Maida Vale ran a country high road. London ceased at Tyburn and the Edgware Road. The Bays Water ran through open fields from Kilburn through Westbourne Green to the dip where it crossed the line of the Oxford Road and entered Kensington Gardens to form the Serpentine River. There were a few houses around Craven Hill and a cluster at the Kensington Gravel Pits, but Porto Bello Farm and Notten Barn Farm stood solitary in their respective fields, and a stately avenue of trees in the park of Holland House fringed the left-hand side of the road as the traveller dipped down the hill to Shepherd's Bush and Gaggie Goose Green. On the south side of the Park the builders had been busy for some time. Sloane Street was finished, and Cadogan Square and Hans Square were the latest additions to the Royal borough of Kensington. But Belgravia had scarcely begun. A fringe of noble mansions lined the way from Knightsbridge to Kensington Gore, but it was open country between Knightsbridge and Brompton, and again between Kensington and Earl's Court. The other—and older—name of Gloucester Road was Hogmoor Lane. Cromwell House, which later gave its name to Cromwell Road, was still an isolated country house. Little Chelsea enjoyed a place here of its own in the Fulham Road; Ranelagh still drew the people of fashion to Chelsea; while the "middling" classes thronged the Neat House Gardens adjoining the Vauxhall Bridge Road. Then, as now, the boys of Westminster School played cricket in Vincent Square, but the star-shaped Penitentiary of Millbank occupied the site of what is now the Tate Gallery.

South of the Thames the story is much the same. On the Thames side, from Wandsworth to Nine Elms and Vauxhall, the Kingston Road still ran through open country with few houses on either side. The wide expanse of the Battersea Common Fields was a favourite shooting ground for snipe! The evangelical bankers of Clapham Common and Clapham Rise had a pleasant morning ride to the City through Kennington

and Southwark. Country of a sort began at Kennington; between the Croydon Road and the Dover Road the ground was still fairly open, even as close in to London as Walworth. Bermondsey and Rotherhithe had not been covered with their ghastly litter of small houses; the Isle of Dogs in Greenwich Reach was still a peninsula of fields, though these were already cut off from Blackwall by the West India Docks, and were no longer famous for the fine wheat which they used to grow in Queen Elizabeth's day. From Greenwich to Woolwich stretched the clear expanse of Greenwich Marsh; on the north bank of the Thames there was scarcely a habitation between Bow Creek and Barking Creek. The empty river levels of Plaistow and East Ham spread back to the Barking Road, and the whole valley of the Lea beyond West Ham and Leyton to Walthamstow was resigned to its native marshes. The great dormitories of London had not yet been built. London slept where London worked. Kingsland and Newington still had their commons. The Green Lane, where Charles Lamb and his sister used to stroll—then, as now, the high road between Islington and Wood Green—was still a real country lane, and the tortuous meanderings of the New River were pleasant to follow. One could get from the Archway Tavern at Upper Holloway to the Regent's Canal near King's Cross—or Battle Bridge, as it was then known—and scarcely pass a single house. Such was the London of a century ago when Mr. W. Faden of Charing Cross produced his delightful zin. to the mile map from a copperplate which was a credit to him and his engravers.

J. B. FIRTH.

JACK HUNTING IN PALESTINE.

IT is a rather dreary vigil for the troops garrisoning the newly conquered parts of Syria and Palestine. They have, nevertheless, their diversions. One of these is jackal hunting. There is a little hunt club, that I know of, that carries on not a hundred miles from Jerusalem. Meets are held on three mornings a week at five fifteen; this is the prime hour of the day to catch master jack returning from his midnight prowls. The master is a hard riding cavalry officer, whose recreation in life is to chase something to the destruction of himself or the quarry; other members of the hunt were in peace time well known figures in the big grass countries over here; there are also one or two enthusiastic starters, whose first acquaintance with horses began in Palestine, and whom Providence alone appears to guard. In all there are generally out a field of six or eight horsemen. There are no hounds, but the members of the hunt are variously armed with polo sticks, lance shafts, tent fly poles, and one member affects a cavalry sword.

The field jog out for some three or four miles over the rolling downs, by which time it has become light enough to see. Open out is then the rule, and the party advance in skirmishing order, with about soyds. interval between horsemen. Before long, in the grey light of the morning, a jack is observed skulking quietly over the sky-line. The man who is first to see him gives a loud whoop, and the whole party start off in hot pursuit. At first the jack goes slightly faster than the horsemen, and as the going is over small wadis, scrub, cracks in the ground, and holes, it is lucky if during the first five minutes, when every one is going at full gallop, someone is not unshipped. Then the jack tires slightly and begins to turn. The man closest up to him takes a swinging drive with his polo stick, misses, and gallops on. The man on his left sees the turn and bends inward to cut off the jack; with his tent pole lowered he rides straight at the quarry. *Hey! Hey! Hey!* he hears frantically, and looking up sees the officer with the sword riding straight across his path. The rules of polo hold good and the man with the sword, who was riding straight on the jack, gets right of way. He misses his point and the jack turns once more. The chase continues until at last someone, with a well aimed blow, knocks master jack on the head and the run is over.

Though it is still little after six, the promise of heat later in the day is already felt, and horses and riders are in a lather. All dismount, girths are loosened, and a ten minutes interval is taken.

It is decided to have one more draw before going home and the party again spread out. This time a very stout-hearted jack is put up in the centre of the line. He is a jack who knows his own mind and he loses no time; he makes straight for a cactus hedge two miles off on the sky line. He is a fast running jack and he got 400yds. start before he was spotted; even the master on his Arab, which he intends to enter at Gezireh as soon as he gets down to Egypt, cannot get on his tail. Nevertheless, two miles is a long stretch for short legs and master jack begins to flag a hundred yards from the hedge. However, he has a stout friend in the hedge, as the field have no mind to take a prickly cactus, 6ft. high, in their stride. Riders slow up, and he just crawls through an opening as the master, coming up sideways to avoid the prickles, takes a swinging blow past his tail.